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TREES, SHRUBS PLANTS, VINES

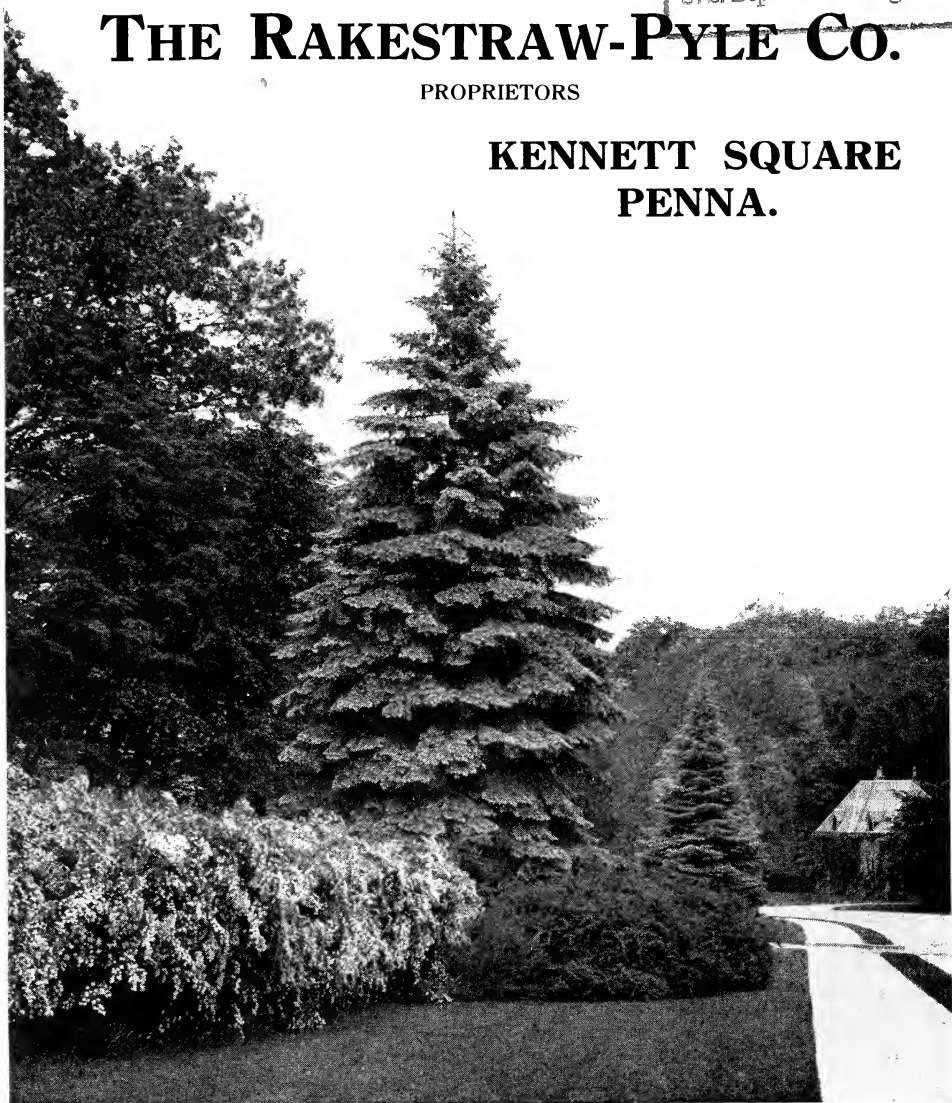
Willowdale Nurseries

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THE RAKESTRAW-PYLE CO.

PROPRIETORS

KENNETT SQUARE
PENNA.



Directions for Transplanting

It is in the highest degree important that every cultivator of trees should understand the art of transplanting, as upon this operation depends, in a great measure, their feebleness or vigor afterward, their sluggish or thrifty growth, and, indeed, vitality itself.

WHEN TO PLANT.—The season for transplanting fruit trees is a matter upon which there is much difference of opinion, but as excellent results attend both spring and autumn planting, the cultivator may safely exercise his prejudice or discretion in favor of either. The best time is when the ground is best prepared and most fertile.

PREPARING THE SOIL.—Select a good, rich, dry soil, which is not subject to surface or spring water. If not naturally dry, it should be well underdrained. Pulverize the earth, and, if necessary, enrich it with manure, thoroughly mixing it with the soil. Let the hole be sufficiently large to admit the roots so that they may lie in their natural position, and have sufficient space in which they can readily start new growth.

PRUNING AND SETTING.—Examine the roots, and pare off all the wounded or broken parts with a sharp knife, cutting with a slope from the under side. Trim off one-third or one-half of the previous year's growth, and, there being fewer buds to start, those remaining will make a more vigorous growth. Place the tree in the ground so that it may not be more than an inch deeper after being planted than it stood in the nursery; take the finest earth and cover the roots, then work the tree up and down until the fine earth is fully incorporated with the small and large roots, so that no air-chambers may be left. When the roots are nearly covered, pour in a pail of water; this will bring the soil in contact with every fiber. After the water has settled away, fill up the hole with surface soil, pressing the earth firmly about the tree with the feet. If planted in the fall, bank the dirt up around the tree to a depth of a foot or 18 inches, to prevent their blowing about, and shovel it away in the spring. If the trees are large, drive two stakes in the ground, east and west of each one, and with a straw band tie it securely.

CULTIVATION.—A young orchard should be well cultivated for several years. A vegetable crop—potatoes, etc.—is the best to raise among young trees, but a crop of grain or grass is always objectionable. The surface around the body of a tree may be covered with loose straw or any other coarse litter to the depth of several inches, spread around as far as the roots extend. This is called mulching, and is especially valuable the first season, as it keeps the ground moist in dry weather.

Trees may be planted in the fall as soon as the leaves have fallen, and any time in the spring, after the frost is out, until the buds begin to put forth.

TREATMENT OF TREES OR PLANTS THAT HAVE BEEN FROZEN IN THE PACKAGES, OR RECEIVED IN FROSTY WEATHER.—Place the packages unopened in a cellar or some such place, cool but free from frost, until perfectly thawed, when they can be unpacked and either planted or placed in a trench, covering the roots well up the stems with earth until convenient to plant. Treated thus, they will not be injured by the freezing. Trees or plants procured in the fall for spring planting should be laid in trenches in a slanting position, to avoid the winds. The situation should be sheltered, the soil dry, and the roots well covered with earth. A mulching on the roots, and a few evergreen boughs over the tops, will afford good protection.

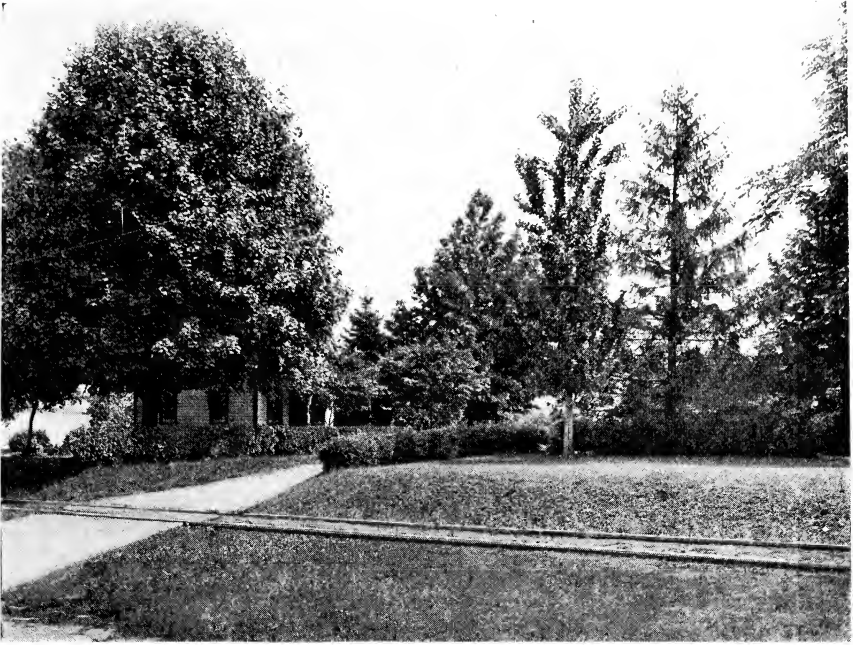
DISTANCES FOR PLANTING

Standard Apples.....	30 to 40 feet apart each way
Standard Pears and strong-growing Cherries.....	20 to 25 feet apart each way.
Duke and Morello Cherries.....	18 feet apart each way.
Standard Plums, Apricots, Peaches, and Nectarines.....	16 to 20 feet apart each way.
Dwarf Pears and Quinces.....	10 to 12 feet apart each way.
Grapes (rows 6 feet apart).....	6 to 8 feet in rows.
Currants and Gooseberries.....	3 to 4 feet apart.
Raspberries and Blackberries.....	3 to 4 by 7 feet apart.
Strawberries, for field culture.....	1 to 1½ by 3 feet apart.
Strawberries, for garden culture.....	1 to 2 feet apart.

NUMBER OF TREES TO THE ACRE WHEN PLANTED AT STATED DISTANCES

40 x 40 feet apart.....	27	18 x 18 feet apart....	135	6 x 6 feet apart.....	1,210
35 x 35 ".....	35	15 x 15 ".....	194	5 x 5 ".....	1,742
30 x 30 ".....	49	12 x 12 ".....	302	4 x 4 ".....	2,722
25 x 25 ".....	69	10 x 10 ".....	432	3 x 3 ".....	4,840
20 x 20 ".....	109	8 x 8 ".....	681		

RULES FOR OTHER DISTANCES.—Multiply the distance in feet between the trees by the distance the plants are apart in the rows, and the product will be the number of square feet for each plant or hill, which, divided into the number of square feet in an acre (43,560), will give the number of plants or trees to the acre.



Office and main entrance to the grounds of Willowdale Nurseries

To Those Who Use Our Products

THE average home-owner, whether living in town or country, always admires the effect of a well-planted lawn and a properly kept fruit orchard. Sometimes he admires these in some other home, and wishes features like them for his own property, but fears it is impossible because "he does not know how to order."

The purpose of this Catalogue is to show by illustration and description how simple it is to have the things you need the most, and to make it easy for you to secure trees and plants for lawn and garden. In this new edition we have found it necessary to make many changes, omitting some of the older varieties which have been superseded by later and more valuable sorts, and particularly those that have been thoroughly tested in our own nurseries and in various plantings. It has been our desire to make the Catalogue more helpful to those whom we are pleased to count among our customers and friends, as well as to those who are yet to be included in this ever-increasing class.

We have been in business ever since 1866, and the fact that we are constantly increasing our plantings of fruit and shade trees, vines and shrubs, proves that our customers like our stock and our methods of doing business.

Throughout our career we have tried to keep pace with our customers' requirements as every successful nurseryman should, offering our trade the best of the newer introductions.

With the issuing of this new Catalogue, we are ready to take care of all orders, large or small, given to us or to our agents. Fruit-growing is on the increase, and farmers are rapidly learning by actual demonstration that many portions of their land yield greater profits if planted to fruit than to other crops.

Our trees are clean, healthy, vigorous, true to name; they are carefully grown where soil and climate are the most favorable, and rarely fail to give entire satisfaction. Trees and plants from Willowdale Nurseries are growing throughout the eastern states.

THE RAKESTRAW-PYLE COMPANY

Kennett Square, Chester Co., Pa.

As to Our Agents

The Rakestraw-Pyle Company is represented by traveling salesmen who are personally known to us, and their integrity is above question. They are bound to act faithfully and impartially in the interests both of their customers and ourselves, and our friends may rely upon the claims they make for our stock.

It frequently happens that the customer is not familiar with the varieties of trees or plants, and is accordingly at somewhat of a loss to make the best selections; in such case the salesman can often make helpful suggestions and will always be glad to assist in any way possible, when desired. You may entrust your order to our salesmen with the full assurance that stock of the best possible quality will be supplied, and that the varieties called for will be furnished.

Purchasers of fruit trees are often at a loss as to the best varieties to select for their locality; whenever desired, we and our salesmen are glad to help in any way possible, by recommending such varieties as we believe, from our long experience, will prove of the greatest value to the purchaser.

SUGGESTIONS FOR ORDERING.—Write your order clearly and distinctly; if for fruit, state whether standard or dwarf trees are wanted. Specify whether shipment shall be made by express or freight, and if railroad station is different from post office, state both. Sign your name and address plainly.

Our friends are particularly requested to order early—do not wait till later, expecting to get the choicest of the stock. If a letter is inclosed with the order, please write it on a separate sheet of paper. Should information be desired after the salesman has left your vicinity, or at any other time, write us; we shall be glad to answer questions.

PRICES.—Prices upon trees and plants listed herein may be had upon application to this office or to any of our salesmen.

TERMS.—Orders from unknown parties must be accompanied by cash or satisfactory reference. Remit by Draft, Post Office or Express Money Order, or by cash in Registered Letter.—**Please do not send personal checks.**

OUR GUARANTEE.—We make every effort to fill all orders accurately; should it be found, however, when plants reach their destination, that a mistake on our part has occurred, we shall be glad to be informed of the fact, and will do all in our power to adjust the matter to the customer's satisfaction.

We use the greatest care to have our stock reliable and strictly worthy, and will on proper proof, replace anything that may not prove true to name. We do not give any warranty, and it is mutually agreed between the purchaser and ourselves that we shall not at any time be held responsible from any cause for more than the original cost of the trees.

OUR LOCATION.—Willowdale Nurseries are two miles north of Kennett Square, Chester County, Pa. Electric cars from Kennett Square to West Chester pass our office every hour. Our freight and express station is Kennett Square, on the Central Division of the Philadelphia, Baltimore and Washington Railroad, one of the Pennsylvania lines. We are about midway between Philadelphia and Baltimore, and have excellent shipping facilities, both by rail and water, from these cities. Our soil and climate are admirable for growing first-class trees, and, with our long experience in the nursery business, we are well fitted to take care of your orders in a thoroughly satisfactory manner.

PACKING AND SHIPPING.—Goods will be securely packed in bales or boxes and will be delivered to the freight or express company in good condition, when our responsibility ceases, and goods travel entirely at purchaser's risk. Railroad and express companies are responsible after the goods are received by them.

Address all communications to

THE RAKESTRAW-PYLE COMPANY

Kennett Square, Chester Co., Pa.

The Apple

For more than two decades there has gradually grown up a remarkable development in the Apple-growing industry. Before this time the production of Apples on a successful commercial basis was thought to be limited to certain sections of the country, but experience has taught that good Apple regions are scattered all over the United States, and that large and profitable crops can be grown without very much regard to the locality.

Success in Apple-growing, as well as in producing most fruits, depends chiefly on three things—first, the quality of the trees, second, the varieties planted, and third, the cultivation and care given the trees, not only in the nursery, but after they are transplanted to the permanent orchard. The first of this trio of claims depends entirely on the nurseryman, on his skill, his knowledge of tree-growing, and his honesty as a business man. If you buy your trees from a reliable grower you need give little thought to this particular point. The selection of varieties should to a large degree be governed by the location, the soil, and the purpose for which the crop is desired, that is, whether for home use, for nearby markets, or for shipping; we shall be glad to advise you on these points. The cultivation, spraying, pruning, and other requirements must be supplied by the orchardist, and here experience is the best teacher, although valuable information can be secured from the state and Government bulletins and from various books published on orchard practice.

It may be said that, as a general rule, land that will produce good corn will produce good Apples, and many hillside tracts that are not available for other crops are ideal for orchards, providing necessary frost-protection and drainage of soil. From a careful view of the situation we are convinced that the Apple-growing industry is bound to develop even more rapidly in the next few years than it has in the past, and that those who plant liberally now will realize handsome profits after the trees come to bearing. In no case do we advise planting many varieties—it is better to determine upon two or three of the best kinds and grow them exclusively.

We give careful attention to the production of Apple trees and offer in these pages an assortment of varieties that we know will succeed, both in the small orchard to produce fruit for home use, and in large commercial plantings. We recommend these varieties without hesitation, and if in doubt as to those that may be best for your locality or purpose, we shall be glad to help you make the selection.

Summer Apples

Cornell's Fancy. For qualities desirable in a late Summer Apple, this variety cannot be excelled. Large, bright red; very attractive. Tree vigorous and productive. Profitable for market because of season. Ripens in August.

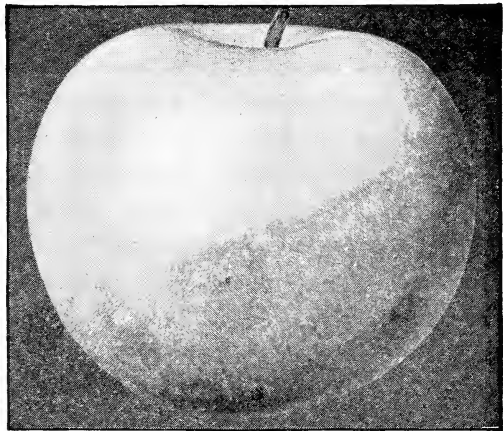
Early Harvest (Summer Pippin of Maryland; Early June of Virginia). Medium to large; round; pale yellow; rich subacid. Tree moderate grower, erect and handsome; good bearer. July to August.

Red Astrachan. Large; round; deep crimson, nearly covered with a thick bloom like a plum; juicy, rich, acid. Tree vigorous; good bearer.

Starr. Good healthy grower; fruits young; an abundant and annual bearer. Fruit large, pale green, frequently with blush. Good shipper; fine for eating and cooking. July to September.

Summer Hagloe. Large; striped bright red. Flesh coarse, tender, juicy, subacid; valuable for market. August.

Summer Rambo. Large; flattened; yellow, beautifully striped with red. Flesh tender, rich, mild; far superior to common Rambo in size and beauty; very productive. September.

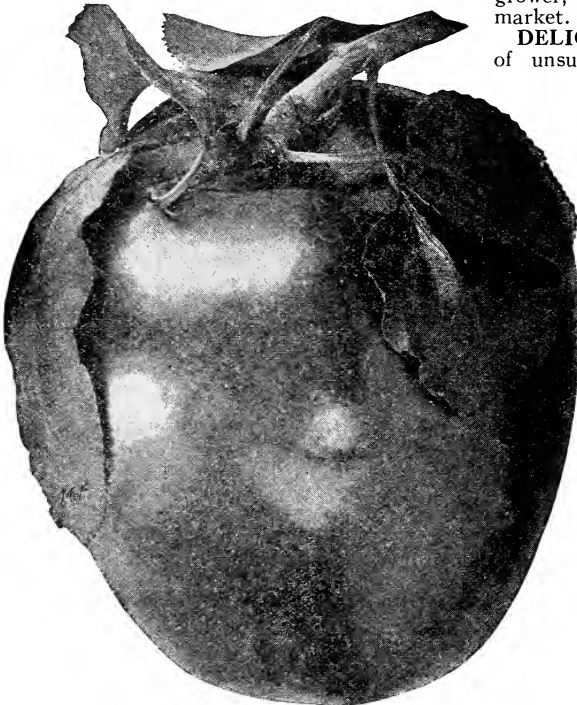


Yellow Transparent Apple

SUMMER APPLES, continued

WILLIAMS' EARLY RED. Large; red; showy; early to medium; productive; good for cooking or eating; excellent for shipping.

Yellow Transparent. Russian. Clear white, pale yellow when matured. Flesh tender, juicy, subacid; quality good. Good grower. July.



Williams' Early Red Apple

Autumn Apples

Fall Pippin. Large; roundish, flattened; yellow, tender, rich, delicious. Tree vigorous grower and good bearer. October to December.

Gravenstein. Superb size and appearance. Bright yellow, dashed with bright red and orange; tender, crisp, high-flavored. September.

Jefferis. Originated in Chester County, Pa. Handsome and of excellent quality; medium size; skin yellow, shaded with crimson; regular bearer. September.

Maiden Blush. Much cultivated for market; valuable for cooking and drying. Clear lemon-yellow with blush. Rapid-growing tree. September.

Oldenburg. A large, beautiful Russian Apple. Roundish; streaked red and yellow; tender, juicy and pleasant. Tree vigorous; adapted to the Northwest. Sept.

AUTUMN APPLES, continued

Smokehouse. A valuable Apple of fine size and handsome appearance. Skin yellow, shaded red. September.

Winter Apples

Baldwin. Rather large; striped red on yellow; mild, rich, subacid; vigorous grower, bears abundantly. Profitable for market. November to March.

DELICIOUS. A large, dark red Apple of unsurpassed quality and handsome appearance. Distinctive in shape because of the four "bumps" upon the blossom end. The flesh is excellent; juicy and of fine flavor. Delicious is equally good for the home orchard and for market shipments. We recommend it as one of the very best varieties.

Fallwater. Very large; skin smooth, yellowish, with dull red cheek; flesh fine-grained, mild subacid; fruit uniformly fair. Tree vigorous, prolific, profitable. November to January.

Grimes' Golden. Of highest quality. Medium to large; yellow; tree hardy, vigorous, productive. January to April.

Hubbardston. Large; round; yellow and red. Tree strong and productive. November to January.

Jonathan. Medium; yellow, striped red; flesh white, tender, juicy. November to March.

Major. A showy market Apple of excellent quality. Tree rapid, vigorous grower; fruit large, roundish; color green, striped and splashed red. Flesh crisp, juicy.

McIntosh (Canada). Trees commence bearing early; fruit medium size; white and yellow, striped with dark red. Flesh tender, juicy, slightly acid. November to April.

Northern Spy. Large; roundish; skin dull red and green; flesh subacid, of first quality. An excellent Apple for either cooking or eating; good cider sort. Tree productive. December and January.

Nottingham Brown. Large; dark red; very attractive; sells at high prices; quality excellent. September to March.

Rhode Island Greening. Popular for market. Fruit very juicy, acid. Bears early and abundantly. Not good south of middle Ohio and Pennsylvania.

Rome Beauty. Large; roundish; light yellow, striped with bright red. Good for Pennsylvania. November to February.

WINTER APPLES, continued

Roxbury Russet. Above medium; greenish yellow-russet; long-keeper and very productive; valuable for market. Strong grower.

Wealthy. Minnesota. Hardy, vigorous and productive. Medium size; red striped white; quality good. December to February; a fall Apple in Pennsylvania.

Winter Banana. Golden yellow, with slight blush or tint of red; excellent flavor, delicious eating, and fine for cooking. Fruit will remain in good condition to middle of January.

Yellow Bellflower. Large; yellow; flesh crisp; juicy, and of sprightly flavor. November to April.

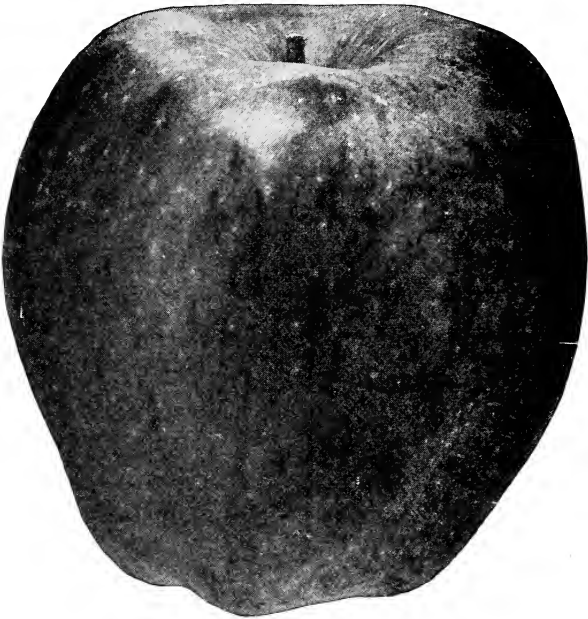
Late Winter Apples

Nero. Large, handsome, and a good keeper. No orchardist in Maryland, Delaware, or the South can afford to be without it.

Paragon (M a m m o t h Black Twig). Similar to the Winesap; tree is more vigorous and hardy and fruit is much larger. Color dark red; flesh firm; an excellent keeper. Flavor mild, pleasant subacid. January to May.

Smith's Cider. Medium to large; greenish white, striped with red; tender and crisp; mild flavor; grows slowly but is very prolific. Very popular; late keeper. December to March.

Stark. Late keeper; valuable for market. Large; skin greenish yellow, splashed with red; flesh mild, subacid, good. Considered one of the desirable introductions for general planting. January to May.



Delicious Apple

Crab-Apples

Hyslop. Fruit large, produced in clusters; roundish ovate; dark, rich red. Tree hardy, vigorous.

Red Siberian. Small; bright red, with a light bloom. Excellent for preserves. Tree exceptionally hardy.

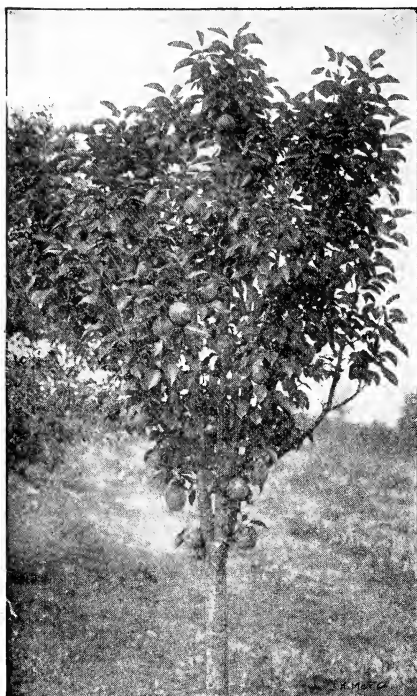
Transcendent. Fruit large; roundish, flattened; golden yellow, striped crimson;

flesh yellow, crisp, subacid. September and October.

Whitney. Large; striped, almost red; flesh yellowish white, very juicy, subacid. Excellent for eating, canning, or cider. Tree vigorous. August.

Yellow Siberian. Small; pale yellow, with light blush; valuable for preserving.

All of the insect pests and tree diseases that seem to hamper the fruit grower can be controlled by proper remedies. At first thought spraying and dusting seems a tedious and irksome task—but with modern materials and machines the drudgery is taken out of the job. In this catalogue we give the remedies for various diseases and poisons for most insects. If you need further help write us; or send to your State Experiment Station, or the United States Department of Agriculture at Washington, D. C., for spraying bulletins.

*Dwarf Pears*

commence bearing early, and we recommend them highly for such places. With a proper selection of varieties, a regular succession of fruit may be secured from earliest to latest. Our Dwarf Pears are budded on Angiers quince which insures the habit of growth and hardness of root, two important parts of Dwarf Pears.

The varieties in the following list marked "Q" succeed well also as dwarfs.

See directions for planting and care of trees on the inside front cover, and spraying hints, page 44.

Summer Pears

BARTLETT (Q). Large; clear yellow; juicy, melting, delicious. Remarkable for early and abundant bearing. August and September.

Clapp's Favorite (Q). Fruit large; uneven; flesh white, fine-grained, juicy, buttery, rich, sweet, vinous, slightly perfumed. Resembles the Bartlett, and ripens earlier. August and September.

Le Conte. Fruit large, smooth, pale yellow, good; ripens about two weeks before Bartlett. Tree vigorous, rapid-growing, prolific.

Autumn Pears

Anjou (Q). Large; light green, shaded dull crimson; flavor rich; flesh melting. Vigorous grower; productive. October and November.

The Pear

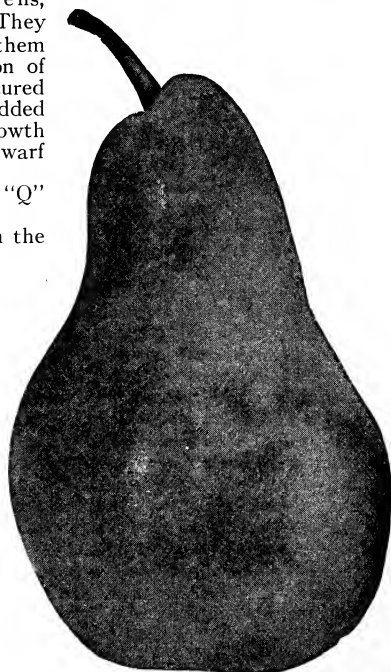
As Pears become more and more popular at the markets, larger orchards of them are being planted. Farmers and fruit-growers have not been giving Pear-growing the attention it deserved. The demand is good, and the prices received make it a profitable business. Standard Pear trees come to bearing about as soon as apple trees, and sometimes earlier.

Trees from 4 to 6 feet high are considered the best size. Select a well-drained loam, rich and deep.

Early Pears should be gathered about ten days or two weeks before fully ripe, and laid on shelves or in shallow drawers in a cool room. They will mature gradually when cared for in this way, and will be found much better flavored than if tree-ripened.

Winter Pears should remain on the trees until the first frost. Then gather them, wrap each fruit separately in paper, and pack carefully in boxes, storing in a cool room, free from frost. After several weeks, remove them to a warmer room where they will develop a finer flavor in ripening. Be sure to keep them wrapped, or they will shrivel.

Dwarf Pears are good for planting in limited areas, as in back yards, small gardens, etc. They

*Bartlett Pear*

AUTUMN PEARS, continued

Clairgeau. Very large, sometimes weighing 20 ounces; russet, with reddish cheek; melting, juicy. A splendid variety. Oct.

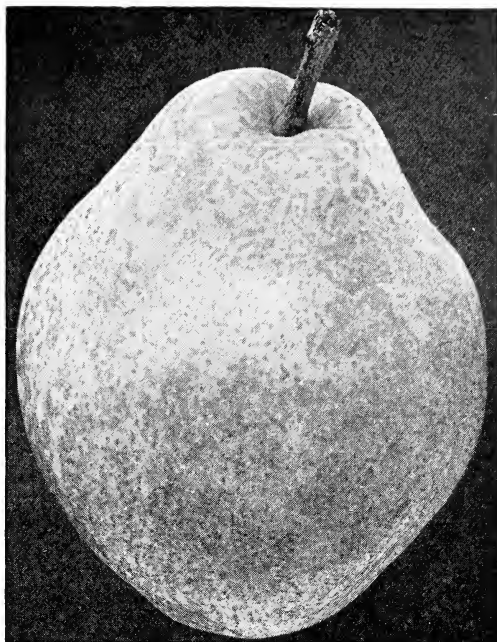
Duchesse d'Angouleme (Q). Very large, often weighing a pound; greenish yellow, with some russet; one of the most popular Pears in cultivation. October.

KIEFFER. Large; deep yellow; flesh white, coarse, juicy, quality variable. Excellent for canning and a most profitable market variety, ripening after others are gone. Immensely productive; comes into bearing very young.

Seckel (Q). Small; yellowish, with a dull red cheek; quality the best. Tree a moderate grower. September and October.

Sheldon. Medium to large; yellow, russet, and red; melting, rich; tree vigorous and handsome; very excellent. October.

WORDEN-SECKEL. Seedling of Seckel; more juicy and equally delicious. Tree hardy, productive, and free from disease.



Kieffer Pear

Winter Pears

Lawrence. (Q.) Large; yellow; rich and high-flavored. Tree hardy and very productive. The most desirable of all Winter Pears. December and January.

The Quince

A few Quince trees should be included in the fruit planting of every home; there is almost always a ready sale for the fruit, and when the trees are properly looked after it is not hard to make them succeed.

To produce the best results, the trees should be cultivated frequently and given a top-dressing of manure each year. Placing a peck of leached ashes from time to time about the base of each tree will help to keep borers from the roots.

Apple, or Orange. Large, orange-shaped, excellent; one of the finest of the old varieties. Trees bear young and are productive.

BOURGEAT. The variety of comparatively recent introduction. The fruit is bright golden yellow, ripening in October, or shortly after the Orange variety, and may be kept in good condition until midwinter. The tree is an unusually strong grower more than ordi-

narily productive. It seems to be the most popular variety of Quince.

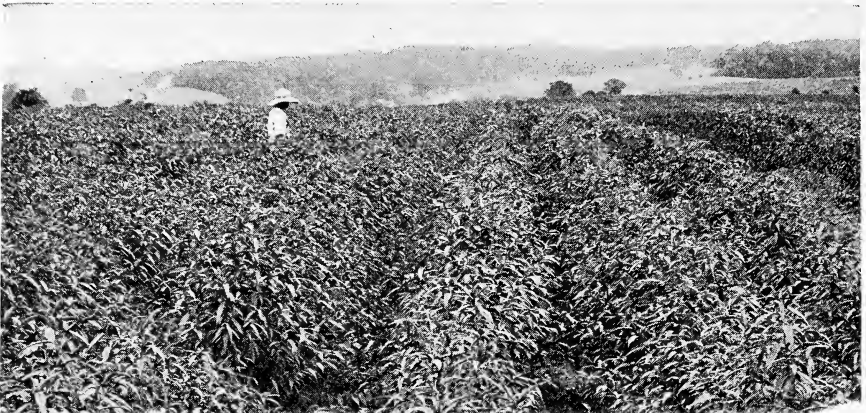
Champion. Tree strong, free grower; comes in bearing second or third year; productive. Flesh cooks tender, free from lumps or cores. Fruit large, equal to Orange. Ripens about two weeks later and keeps till February.

Meech's Prolific. Fruit very large, handsome, and attractive, of delightful fragrance and flavor; cooks tender.

Persimmon

Although there are quite a large number of Asiatic species belonging to this genus there is but one that is entirely reliable at the North. The Persimmons are grown chiefly for their fruit, which is a large, pulpy berry, very astringent when unripe, but edible after being subjected to the action of frosts.

D. virginiana (American Persimmon; Date Plum). Commonly a medium-size tree, native of the United States, with dark, furrowed bark and deep green foliage. The fruit is roundish, reddish yellow and sweet.



The healthy growth of our Peach trees, as shown in illustration here, proves that we know how to grow them

The Peach

Good Peaches begin first with the planting of good trees. Everybody enjoys this delicious fruit and may have an abundance of it by selecting the proper varieties and giving the trees proper attention.

Peach trees will thrive in almost any well-drained, light, open soil, but care must be taken to select one with as much protection as possible against frost. The trees should be planted about 20 feet apart, and trimmed early the first spring after planting so they will "head" low. After this the only requirement is to remove unnecessary branches so that plenty of sunlight and air are admitted to all parts of the tree to properly ripen the fruit. When the trees are set heavily with fruit, thinning should be practised, as the Peaches that remain will ripen with better color and flavor and be much larger and more salable. Frequent cultivation, the use of plenty of fertilizer, and regular spraying to keep down disease and insects, particularly San José scale, are important to the successful growing of Peaches.

A sharp lookout should also be kept for the "borer" which works at the roots near the surface of the ground, and may easily be located by the thick gum which appears on the bark. When this is seen, the worm may be dug out easily with a knife or other sharp instrument. A better way, however, is to prevent the laying of eggs from which the borer is hatched. This can be done by heaping a little mound of wood-ashes about the base of the tree. The ash will not only keep out the borers but will also drive out root lice, ants, etc. Another good way is to apply a strong solution of lime-sulphur to the trunk with a hand spray pump or with a paint-brush.

From the many varieties of Peaches we have selected those that have proved to be best adapted to general planting. The trees are healthy seedlings, budded from trees that we know to be free from "yellows" or other diseases. We do not advise planting too many varieties. If in doubt as to the best kinds for your neighborhood, ask us to recommend those that will do best for you.

See spraying hints on page 44 and directions for planting and care of trees on the inside front cover.

Extra-Early Variety

Mayflower. From North Carolina. Is absolutely red all over, making it a valuable market variety. First of July.

Early Variety

Greensboro. The largest and most beautifully colored Peach. Of good quality; juicy; freestone, adhering slightly; ripens perfectly to the seed.

Third Ripening

Champion. One of the hardiest and most reliable varieties. Large size and good quality; skin rich, creamy white, with red cheek; flesh firm, rich, juicy; a perfect freestone. A good variety for commercial orchard or home garden.

We shall be glad to assist customers and others who wish to plant fruit trees. Write us about your problems.

Fourth Ripening

CARMAN. Large; oblong, resembling Elberta; the best-flavored early Peach known. The skin is tough, making it just the Peach to ship a long distance. The trees will succeed in wet soils where others fail.

Hiley. Seedling of Belle of Georgia. Fruit large, more highly colored than the Belle, which it resembles. As beautiful and as good as Mountain Rose and a week earlier. Flesh white. Middle of August.

Mountain Rose. Very valuable; high color and fair size; flesh white, juicy, rich, excellent. One of the most attractive.

Fifth Ripening

Crawford's Early. Magnificent yellow-fleshed variety; highly desirable for market. The trees are moderate growers and very productive. Fruit is small to medium, highly colored; between Large Early York and Oldmixon Free.

Captain Ede. Very large, yellow freestone, with a delicate carmine on one side. Ripens with Crawford's Early, one week before Elberta; good shipper.

ELBERTA. One of the most popular commercial Peaches ever introduced. Very large; golden yellow, striped with red; flesh yellow, of fine texture; juicy and of remarkably good flavor.

J. H. Hale. Color golden yellow, with red cheek. About five days earlier than Elberta, and the fruit is considerably larger than that variety. Flavor considered better than that of Elberta.

ROCHESTER. A new variety with a yellow skin, tinged with carmine. Fruit is fully as large as Elberta; sweet and juicy; keeps well, and may be shipped for long distances. Some trees will bear in two or three years after planting. Ripens about mid-August.

Sixth Ripening

Oldmixon Free. A superior market fruit; ships, grows, and produces well; fruit large, of good flavor and color.

Reeves' Favorite. Large; roundish; yellow, with red cheek; flesh yellow, red at stone, juicy, vinous; hardy.

Seventh Ripening

BELLE OF GEORGIA. Large; white, with red cheek; flesh white, firm, and excellent; fruit large and showy; free.

Crawford's Late. Best of its season; yellow-fleshed. Unsurpassed in quality and as a profitable market fruit.

Fox Seedling. Valuable Peach; desirable for large size, fine quality, and good for both shipping and market. White; freestone; red cheek; productive.

Stevens' Rareripe. Large; white, shaded and mottled red; flesh white, juicy, vinous, of high quality. Freestone. Begins to ripen with the last of the late Crawford's and continues from three to four weeks. Hardy; a heavy bearer.

Stump the World. Very large; creamy white, with bright red cheeks; flesh white, juicy, and high-flavored; very productive. Splendid market variety.

Eighth Ripening

Beer's Smock. One of the most profitable market varieties, especially for the northern section of the Peach-growing district. Fruit yellow, mottled red; large; second in quality; an enormous bearer and excels as a shipping fruit. Tree hardy, vigorous.

Ninth Ripening

Iron Mountain. New Jersey. Tree vigorous and productive. Freestone; large; pure white; flesh white, solid, juicy, sweet. October.

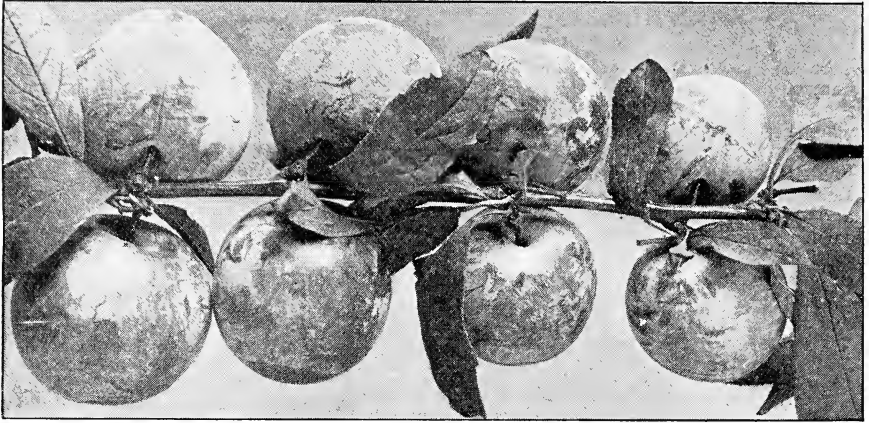
Salway. Large; skin bright yellow, mottled with red; flesh yellow and red, excellent quality. Hardy; profuse bearer. Ripens after Smock.

Wonderful. Exceedingly large, regular, uniform; rich golden yellow and carmine. Ripe in central New Jersey the second week in October; keeps three weeks after it is gathered.

Wilkins, or Ringgold Mammoth Cling. A white-fleshed cling; ripens with late Heath, but is almost double its size, and should be planted instead. Profitable for market, bringing good prices.



Elberta Peach

*Abundance Plums*

The Plum

Like other fruits, the Plum requires special cultivation to develop it properly, but, as in other cases, such attention pays well and makes this a profitable fruit to raise. The trees thrive best in a rather heavy soil, and do well when planted in back yards or in poultry-runs.

The principal enemy of the Plum is the curculio, which may be held in check by spraying—see page 44—or by shaking the branches early in the morning.

If the latter method is followed, spread a cloth under the tree to catch the insects and infected fruits that fall. Strike the tree with a mallet or similar instrument padded in such a way as not to injure the bark, and carefully destroy all insects and fruit found on the cloth afterward.

With ordinary care, Plum trees will live and bear profitable crops for many years.

Bradshaw. Dark, violet-red; juicy and good; tree vigorous and very productive. July.

Coe's Golden Drop. Very large; light yellow; rather firm, rich, sweet and good; adheres to the stone. Tree moderately vigorous and productive. Last of September.

German Prune. Fruit dark purple, with blue bloom; flesh firm, sweet, pleasant. A very valuable fruit, bearing enormous crops. September.

Gueii. Very large; dark purple; hardy and productive; popular in plum-growing regions. Late September.

Imperial Gage. Large, oval, greenish fruit; juicy, sweet, agreeable; free. Tree vigorous and productive. A variety that has proved of value as a market Plum, shipping and selling well. August.

LOMBARD. Medium size; delicate violet, dotted thick red; flesh deep yellow, juicy. One of the hardest and most valuable Plums. Succeeds well everywhere; very productive, and a good market variety. August.

Prince Engelbert. Deep bluish purple, with a dense bloom; flesh juicy, melting, rich; freestone. Late August.

Reine Claude de Bavay. Large; greenish yellow, spotted red; flesh firm, juicy, sugary, rich, of fine quality; slightly clingstone; vigorous, productive. Sept.

Yellow Gage. Oval in form with yellow skin; flesh yellow, juicy, and rich. Tree vigorous and productive. An excellent and profitable variety. Middle of August.

The Japanese Plums

This race of Plums has renewed interest in Plum-culture. The trees begin bearing early, and are very productive in after years. There are many different varieties, varying in size, quality, and time of ripening. The varieties here described we believe to be the very best. The trees are hardy and vigorous and seem well adapted to all sections.

ABUNDANCE. Tree handsome, thrifty, and hardy; begins bearing young and produces large crops. The fruit is oblong, nearly covered with bright red; flesh yellow, sweet, juicy, excellent. The most popular Plum in the list. August.

Burbank. Fruit large; roundish; clear red, with thin bloom; flesh yellow, sweet, with agreeable flavor. Tree vigorous, beginning to bear at two years old. Aug.

JAPANESE PLUMS, continued

Ogon. Trees vigorous and hardy. Fruit large, roundish; bright yellow with faint bloom; flesh firm, rich, sweet and dry; freestone. Excellent for canning; one of the earliest, the fruit beginning to ripen the latter part of July.

Satsuma. Purple and red skin with rich blue bloom; flesh firm, juicy, dark red; quality fine; pit small. Hardy and vigorous. August.

Red June. Medium to large; deep red, very showy; flesh light lemon-yellow, firm, juicy, of good quality; semi-cling; pit small. Tree vigorous and productive; one of the earliest.

WICKSON. Another Burbank introduction. Color deep red; flesh firm, dull yellow, with an aromatic flavor; an upright grower. Keeps and ships well. One of the latest.

Nectarines

The Nectarine is an accidental variety of the peach, with a smooth, thin skin, like a plum. It requires the same soil and culture as the peach, and the same attention as the plum and apricot, to protect it from the curculio. Fruit wax-like, and one of the best for dessert. Plant trees 12 to 16 feet apart.

Boston. The largest of the Nectarines. Bright yellow, deep red cheek; flesh yellow, sweet and pleasant, though not rich. Early September.

Early Newington. Large; pale green, blotched red; juicy, rich, sweet. One of the earliest; probably the best.

Elruge. Medium size; pale green, with deep violet cheek; melting, juicy, rich flavor. Early September.

Pitmaston's Orange. Large; yellow with red cheek; quality good. Late August. Appearance handsome; commands highest prices at market.

The Apricot

Among all the beautiful and delicious stone fruits, the Apricot stands high; resembling the plum in shape, but is downy like a peach, and partakes largely of its excellence and flavor. The trees resemble a peach tree in habit of growth, but are not quite so hardy; it is advisable to plant the trees where they may be protected from the extreme cold winds of winter by buildings or an evergreen windbreak. It requires the same treatment as the plum to protect it from curculio.

Breda. Below medium size; dark orange; rich, juicy, sweet, high-flavored; productive. First of August.

HARRIS. Fruit large; rich golden yellow, with a faint blush on the sunny side; of first quality, and a perfect freestone. It is an early and abundant bearer. As large as the best grown in California and better in quality. July 1 to 15.

MOORPARK. Large; orange, brownish red in the sun; flesh firm, juicy, rich, luscious. First of August.

Peach. Very large; yellow, with orange cheek; juicy, melting and rich; considered by some the best of all; very vigorous and productive. Last of July to first of August.

St. Ambrose. Almost the size of Moorpark and earlier; deep red, of excellent quality.

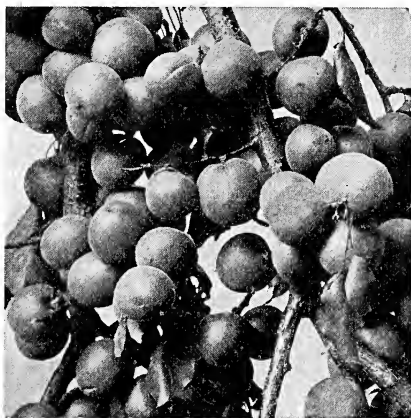
Alexander. Tree hardy; an immense bearer. Fruit large, oblong; yellow, flecked with red; sweet, delicious. July 1. One of the very best.

J. L. Budd. Hardy, strong grower, and a profuse bearer. Fruit white, with red cheek; sweet, juicy, extra fine, with a sweet almond kernel. A decided acquisition to the Russian Apricot group because of its good quality. August.

The Russian Apricot

This fruit was brought to the United States by the Russian Mennonites. It has proved to be universally hardy, to bear annually and abundantly, and some varieties produce fruit of size and flavor unequaled by European or American sorts.

Alexis. Tree hardy, and abundant bearer; fruit medium to large; yellow, with red cheek; slightly acid, rich, luscious.



The Cherry

This valuable fruit does best in dry sandy or gravelly loam. If the trees are planted in wet soil, or heavy soil that is poorly drained, they are short-lived and quickly decay. The question of drainage is really more important than the selection of soil. When well established, Cherry orchards are extremely profitable, as the market is rarely overstocked. If the fruit is carefully and attractively packed, good prices are almost sure to follow.

In the following list the varieties are divided into two classes: Heart and Bigarreau, and Duke and Morello. Cherries of the Heart and Bigarreau class both light and dark, are sweet flavored; the Duke and Morello class are more or less acid. The varieties in our list are those that we can recommend for general planting.

See directions for planting and care of trees on inside front cover, and spraying hints on page 44.

Heart and Bigarreau Cherries

Black Tartarian. Very large; bright glossy, purplish black; half-tender, juicy, rich, and fine. Tree vigorous, upright grower and great bearer. Early June to July.

Governor Wood. Yellow, shaded with red; juicy, rich, and delicious. A strong and productive grower. Middle of June.

Napoleon. White, with red cheek; a large, firm, juicy and sweet Bigarreau Cherry of great excellence and one of the most profitable for market. First of July.

Schmidt Bigarreau. Remarkably hardy and productive. Fruit grows in clusters and is of the largest size; deep black; flesh dark, tender, juicy, with a fine rich flavor. The tree is a rapid grower and forms a well-shaped head without a great amount of cutting. July.

Rockport. Large; amber and light red; half-tender, sweet, rich and excellent.

Tree vigorous, erect, beautiful and productive. Last of June and first of July.

Windsor. A large and very dark-colored Cherry; firm, solid, rich, and good; vigorous, hardy tree and very prolific. A variety of value for the home-orchard. Ripens latter part of July.

Yellow Spanish. Large; yellow, with some red in the sun; firm, rich, and delicious. Last of June.

Duke and Morello Cherries

Trees are of slow growth and rather small, bear freely.

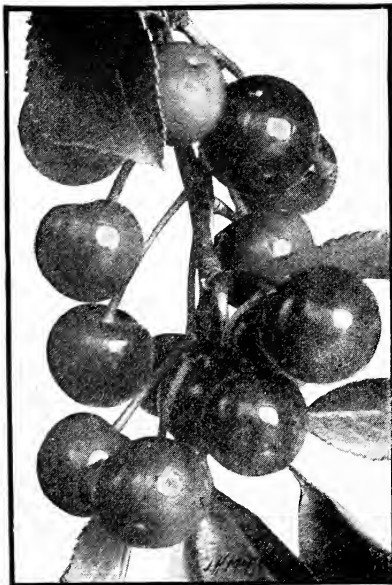
Dyehouse. In hardiness and general appearance resembles Early Richmond, but is of finer quality and several days earlier; it produces very regular annual crops. Fruit medium; skin bright red, darkened in the sun; flesh soft, juicy, tender, sprightly, subacid, rather rich.

Early Richmond. Fruit of medium size; dark red; melting, juicy, and quite acid; the stone adheres to the stem with remarkable tenacity. Unsurpassed for cooking purposes. Tree a slender grower, with a roundish, spreading head, and is exceedingly productive. One of the best-known standard varieties, and a sort that finds a ready market in all Cherry-growing sections. Ripens through June.

English Morello. Large; dark purplish red; juicy, rich and acid; a remarkably productive sort, ripening at the end of the Cherry season. First of August.

May Duke. A large, dark red variety, and probably the most popular and profitable of all Duke Cherries. Tree hardy, a vigorous, upright grower, and an abundant producer of choice fruit. Middle of June.

Montmorency. A Cherry of the Richmond class, but larger and more solid. The fruit is bright red, quite large, and has a pleasing acid flavor—just sour enough to be good. It is a good shipping sort and one of the best for canning. Tree a more upright grower, equally hardy and a heavy cropper; blooms from seven to ten days later than Richmond. A fair crop may be expected even in unfavorable seasons.



Early Richmond Cherries



The Grape

Every home needs Grapes, and since the vines will grow so readily in almost any location and in almost all soils, they should never be omitted from the fruit planting. They may be trained over a trellis or upon a fence, and require little attention, except ordinary fertilization, cultivation, and an occasional spraying. Directions as to the latter will be found on page 44.

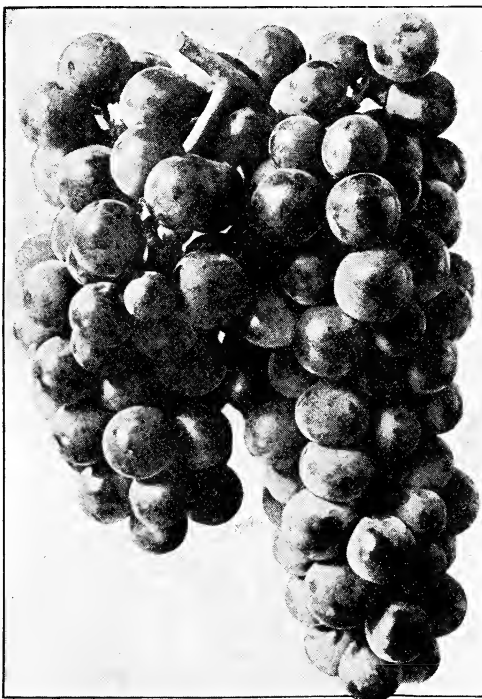
When the fruit is set it is a good plan to enclose each in a paper sack, the mouth of which is gathered and pinned closely around the stem, just above the "shoulder" of the cluster. This keeps out insects, dust, dirt, etc., but does not hinder the maturing of the fruit, which ripens with a finer color and flavor than if left directly exposed to the sun.

See directions for planting and caring for trees on the inside front cover.

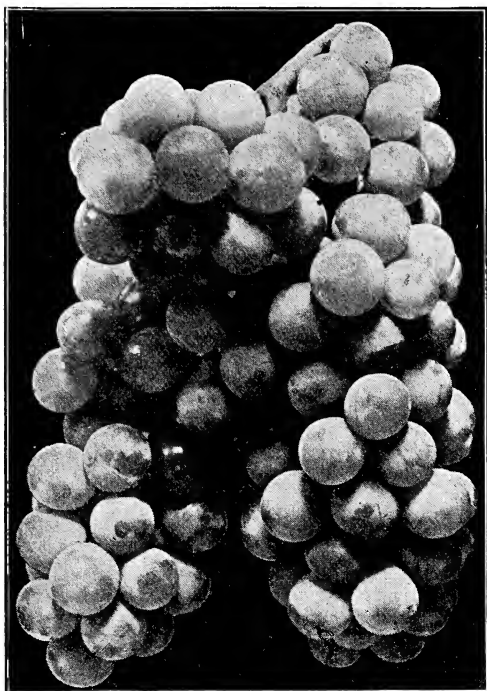
Agawam (Rogers' No. 15). Vigorous and productive; bunches large and quite compact; berries large, dark red and juicy. Ripens about first of October.

Brighton. In color, form of bunch and berry resembles Catawba, combining the sprightliness of that variety with the richness and sweetness of Delaware; vine vigorous, hardy and productive. A most desirable early variety for family use, and should be in every garden.

CACO (Catawba-Concord). A hardy variety considered equal in quality to the finest varieties grown under glass. The berries are large, wine-red in color, and borne in good-sized, compact bunches. Ripens earlier than Concord. The vines are strong, vigorous growers.



Campbell's Early Grapes

*Moore's Diamond Grape***GRAPES, continued**

Campbell's Early. Of strong, hardy, vigorous growth and thick, heavy, perfectly healthy foliage. Ripens early and bears large and handsome clusters of glossy black berries with blue bloom; pulp sweet and juicy; seeds small, few in number and part readily from the pulp; keeps and ships well. Matures from middle to last of August, according to season.

Catawba. Berries medium large; deep red, covered with a lilac bloom; juicy, sweet and rich.

Concord. Where the more delicate and finer varieties have utterly failed, this has produced abundant crops. Berries black; flesh juicy and sweet; vine hardy and vigorous.

Delaware. Bunches small and compact; berries below medium size. Skin thin; flesh tender, juicy and sweet, with scarcely any pulp. Vine hardy and productive. The highest flavored native Grape known.

Empire State. A white Grape producing handsome clusters. Ripens early, is very productive and of excellent quality. Vine hardy and vigorous. One of the best.

Green Mountain. Extra-early; greenish white; skin thin; pulp tender and sweet; contains few seeds, which separate readily from the pulp; quality superb. Hardy, vigorous and productive.

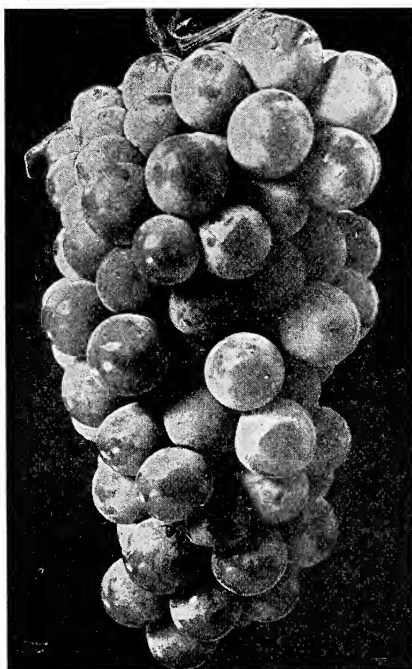
Moore's Diamond. Delicate greenish white with rich yellow tinge; juicy, rich, sweet and sprightly; soft, tender pulp. Bunch and berry medium size and moderately compact; hardy and strong grower.

Moore's Early. One of the best early Grapes. A seedling of Concord and as vigorous and hardy as its parent, ripening ten days or two weeks earlier. Bunch large; berry large, round; black, with a blue bloom; quality good.

Niagara. White. Bunch large, handsome, sometimes shouldered, compact; berries large; skin thin, but tough; flesh sweet and of good quality; good shipper; vigorous and productive. Medium early.

Salem. Dark red; bunch large, compact, shouldered; berries large, round; skin thick and firm; flesh very sweet, tender, with a rich, aromatic flavor. Vine moderately vigorous, hardy, healthy; ripens earlier than Concord when not permitted to overbear.

Worden. Bunches handsome, double-shouldered; berries large, sweet. Ten days earlier than Concord, and ripens well in cold localities. Vine thrifty and vigorous.

*Niagara Grape*



The Small Fruits

Fruit-growers in general, as well as farmers and others who produce fruit merely as a "side issue," are rapidly learning the value of small fruits, and the profits awaiting those who grow them. That there is money in strawberries, raspberries and other small fruits is proved by the numerous "small fruit farms" in the neighborhood of our large cities. Experience has shown that there is a uniformly good demand and that prices remain high throughout the season.

Moreover, small fruits may be grown in connection with an apple, peach, or pear orchard, and many growers follow this plan to advantage. The large trees require several years to come into profitable bearing, and it is advisable to use strawberries or other small fruits as inter-crops and thus make the land profitable from the very first year. The cultivation given the small fruits is good for the trees, and when the latter begin bearing and need the land the berry plantings can be moved.

In making up the list for this edition of our Catalogue, we have found it advisable to take out some varieties and substitute newer and more valuable sorts. We are quite sure you will be pleased with all that are here listed.

The Strawberry

THIS is one fruit that seems to be "at home" in almost every kind of soil, and it is reasonably safe to say that there is no location where the plants will not thrive and bear freely. Some fruits may be expected, even though little or no attention is given to the bed, but the returns in bigger crops and larger fruits will richly repay the grower for any pains taken in cultivation and caring for the plants.

To properly prepare the Strawberry-bed, dig the soil deeply and prepare trenches $3\frac{1}{2}$ feet apart. The plants may be set from 9 to 18 inches apart in the row. Cultivate freely, and unless the "matted" row is desired, keep runners pinched off; this will throw the strength of the plant into producing berries. Planting should be done in spring, and the vines will bear the following spring. New beds should be set out each year, and the old vines plowed under after two or three years of bearing, as after this time the fruit begins to "run down" in size and quality.

We are personally familiar with the varieties in the following list, and recommend them without reserve. All of the varieties in our list are perfect flowering, and do not require other sorts to pollinize their blossoms.

Big Joe (Joe Johnson). Midseason to late. Berries large and borne freely on strong plants. Seems to do well on almost all soils and under all conditions. Fruit deep crimson, broad, but rather blunt.

Brandywine. Fruit colors all over. Berries are very large, nearly always of regular, conical form; color bright glossy red; flesh firm and of excellent quality. One of the best late sorts.

STRAWBERRIES, continued

Chesapeake. Late, very productive, and an excellent shipper. In quality, one of the very best—as large as Gandy. Plant a strong grower; leaves free from rust. One of the most desirable, either for home or market.

Gandy. A reliable late variety; berries bright crimson; very uniform in size and shape; large and firm; plants vigorous and healthy.

Glen Mary. Berries large, often flattened; bright, deep red on surface, light red to center; sweet, rich and good; season medium to late. Extremely productive and holds its size well to end of season; plant vigorous. One of the best for home use and nearby market.

Premier. Fruit bright red, above average size; extra early and produces a heavy crop; profitable for home use, local markets, or distant shipping.

Wm. Belt. A well-tested variety that is giving remarkable satisfaction as a large, handsome, productive berry for market or home use. Vigorous, thrifty, heavy plant, producing immense crops under good common matted-row culture. Berries large, conical, uniform; brilliant, glossy red; ripens all over without green tips; of good quality; carries well to market and brings highest prices.

Everbearing Strawberries

PROGRESSIVE. Fruits deep crimson, quite glossy, and of medium size. The plants are vigorous growers with large green leaves and multiply more rapidly than many of the fall-bearing varieties. A heavy crop is borne in June, and if the blooms are removed after the middle of June the autumn crop will be greatly improved.



Columbian Raspberries

The Raspberry

On account of the market demand for first-class Raspberries, the growing of this fruit is a profitable industry. One drawback, however, has been the fact that the berries were too soft and crumbled too easily to ship successfully for long distances. The newer varieties have largely overcome this, however, and several of those in the following list will be found just as desirable for market purposes as for home use. Sixty bushels per acre is considered a fair average yield. An acre of Raspberries will give a good income—a dozen will supply the family table.

The vines should be planted 2 to 3 feet apart in the row, and rows should not be closer together than 6 feet. Spraying is beneficial; see spraying hints, page 44.

*Cumberland Raspberries*

Red Raspberries

Columbian. A most vigorous grower; roots penetrate to a great depth, enabling it to resist drought. Propagates from the tips. Fruit large—sometimes an inch in diameter; dark red, bordering on purple; adheres firmly to the stem; sprightly flavor.

Cuthbert, or Queen of the Market. A remarkably strong, hardy variety; stands the northern winters and southern summers equal to any. Berries measure 3 inches around, conical, rich crimson, very handsome, and so firm that they can be shipped hundreds of miles by rail in good condition; flavor is sweet, rich and luscious. The leading market variety for main crop.

Gregg. This is a dark purple berry, as large as Columbian; early; crop ripens in about two weeks—an advantage to the market-grower; canes hardy; fruit of good quality; an enormous bearer; propagates from tips.

Herbert. In hardiness this easily takes first place, standing a lower temperature than any other kind. The cane is very strong and vigorous, slightly prickly; leaves large and healthy; fruit bright red, somewhat oblong, larger than Cuthbert or Loudon; flavor sweet and juicy; the very best for table use. Enormously productive. Season five to six days before Cuthbert. Holds its size well to end.

Japanese (Wineberry). Ornamental both in fruit and plant. Canes covered with purplish red hairs. Leaves dark green, silvery gray beneath. Fruits in large clusters and each berry is at first tightly enveloped by the large calyx, forming a sort of bur, which is covered with purplish red hairs. These gradually

open and turn back, exposing beautiful wine-colored fruit of medium size, brisk subacid, retaining flavor when cooked. Highly esteemed for canning, preserves, jellies, etc.

St. Regis. One of the finest red Raspberries for home use and market sales. The large berries are bright crimson, quite firm, and with a true Raspberry flavor. Largely planted because of its excellent quality and long season; the berries start to ripen with the extra-early sorts and continue to bear until well into October. The canes make a strong growth and are absolutely hardy.

Black Varieties

Cumberland. A Blackcap variety of fine size and good quality. The plant is a strong, vigorous grower and perfectly hardy. Ripens a little in advance of Gregg.

Kansas. A strong, vigorous grower, standing extremes of drought and cold and bearing immense crops. Berries size of Gregg, of better color, jet-black, almost free from bloom, firm, of best quality, handsome; brings highest price in market. Early.

Plum Farmer. From Adams County, Pa. Claimed to be the largest, most productive, best-colored, and most attractive Blackcap in cultivation. Ripens early, and the bulk of the crop is produced in a short time.

Yellow Varieties

Golden Queen. A yellow Raspberry, seedling of the Cuthbert. It is very productive and hardy. Berry is large, of beautiful color and excellent quality; medium to late, and continues long in bearing. An excellent garden berry.

The Blackberry

Plant in rows 6 to 8 feet apart, and 2 to 4 feet apart in the rows. Cultivate the wide space well, and cut the tops off the tall plants, which causes them to grow strong enough to stand without support. Eighty bushels to the acre is an average yield in field-culture.

Eldorado. Canes vigorous; hardy; heavy bearing. Berries large, jet-black, borne in clusters; sweet, melting and pleasant; no hard core; a good keeper.

Erie. Fruit is round, of the largest size, excellent quality, handsome, firm, and ripens between Early Harvest and Wilson's Early. The berries are unusually uniform in size and shape, there being scarcely any small or imperfect berries. It is a superior variety for canning. Canes very hardy and prolific.

Ward. A seedling of the old Kit-tatiny, which it resembles somewhat. A very strong grower; perfectly hardy. The

fruit is black throughout, firm and good for shipment, yet tender and melting, and of highest quality.

Wilson. Indispensable to every market grower on account of its extreme earliness, ripening its crop before peaches take the sway of the market, and out of the way in from two to three weeks.

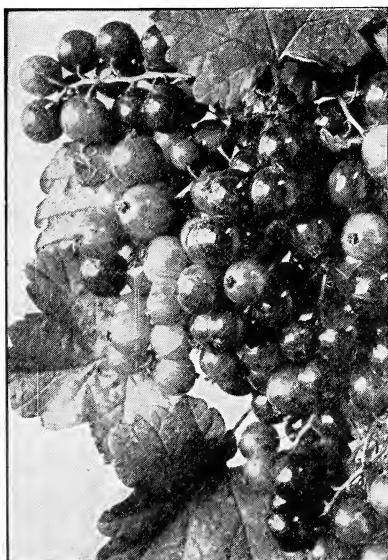
Lucretia Dewberry. Large; fine-flavored; without core; very productive. The canes are slender and trail on the ground like the common Dewberry. Train them on an A-shaped frame, or place some support, like brush, underneath to keep them from the ground.

The Currant

The Currant has great vitality, and will give some fruit under almost total neglect, but to have the fruit in perfection, plant in rich, deep soil, and give good annual pruning and cultivation.

The pruning, if the plants are allowed to grow to "stools," consists merely in removing such of the older and feebler shoots as crowd and overtax the plant. If grown as a tree, on a single stem, remove a portion of the bearing wood to increase the size and beauty of the crop, and keep all suckers from the bottom. Four feet apart each way is about the proper distance to plant. See spraying hints, page 44.

Cherry. Fruit of largest size; deep red; rather acid; short bunches; growth strong, stout, erect; short-joined shoots.



Perfection Currant

Fay's Prolific. A justly popular variety; fruit is bright red, of good quality, less acid than the Cherry. Valuable for market and home use. Free production and bears when quite young.

Perfection. As large as or larger than Fay's, the clusters averaging longer. A beautiful bright red; rich, mild, subacid; few seeds; a good grower; very productive. Long stems.

Pomona. Not so large as Cherry or Fay's Prolific, but is of good size. It is a beautiful, clear, bright, almost transparent red, has but few and small seeds, is easily picked, and hangs a long time after ripening. A hardy, vigorous grower, exceedingly productive, and of the best quality.

White Grape. Very large; yellowish white; sweet, or a very mild acid; of excellent quality, and valuable for the table. The finest of the white sorts. Of spreading habit and dark green foliage; very productive, and a most delicious and delicate table fruit of great beauty.

Wilder. Very large, light red; superior for table, canning or market; enormously productive; flavor delicious, mild acid.

To destroy the Currant worm, which affects alike both Currants and Gooseberries, spray the bushes thoroughly. See "Spraying Hints," page 44.

The Gooseberry

The Gooseberry loves a deep, rich, rather cool soil. The plants require to be annually and rather severely pruned to thin them out and to increase the size of the fruit. In all American seedling varieties great improvements have been made by the introduction of the new sorts named below.

A liberal mulching of manure tends to prevent mildew, which is very liable to injure all the foreign sorts, but seldom affects the American seedlings. See spraying hints, page 44.

Downing. Medium to large, oval; greenish white. Plant vigorous, upright, very productive; excellent.

Houghton's Seedling. Vigorous, very productive, and free from mildew; pale red; medium size.

Josselyn Red. Very large, smooth berry. It is the one large, red Goose-

berry that can be planted with confidence of success by all lovers of this fruit. Foliage best and most healthy of any Gooseberry known.

Smith's Improved. Fruit large, oval; light green when ripe; sweet and excellent. Plant vigorous, extremely productive, hardy, healthy.

The Nut Trees

Nut-culture is an industry well worthy the attention of planters. Aside from the crops, which are very profitable, most kinds make a valuable growth of timber, which would of itself pay well on the investment. On almost every farm there are places not well adapted to farming, that would suit admirably for growing nuts, and would show handsome returns on the land and investment in trees.

Almond

Hard-Shell. A fine hardy variety, with a large, plump kernel. Exceedingly ornamental when in bloom.

Soft-Shell. This is the "Ladies' Almond" of the shops, and although preferable to the former, is not quite so hardy.

Hickory

Shellbark. Too well known to need description. The trees should be transplanted when small.

Pecan

The Pecan is better adapted to southern states, where it bears profitable crops. Our trees are of the finest variety, bear transplanting well and will produce the best "paper-shell" nuts, sweet and delicious to the taste. In sheltered locations the Pecan is reasonably hardy in the North.

Butternut

A rapid, lofty grower, producing large, longish nuts, with sweet kernels of good flavor.

Filbert

English (Hazelnut). Of very easy culture; entirely hardy, succeeding in almost all soils; bears early and abundantly, and is one of the most profitable and satisfactory nuts to grow. The nuts are nearly round, of excellent flavor, and liked by all for dessert.

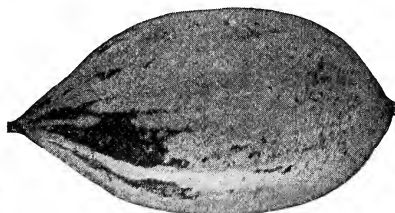
Walnut

Black. The well-known native species; hardy, prolific and valuable. The wood takes a splendid finish; in point of durability and beauty it is difficult to excel. The nuts are familiar to all who have lived in the country, and are as good today as when we were boys.

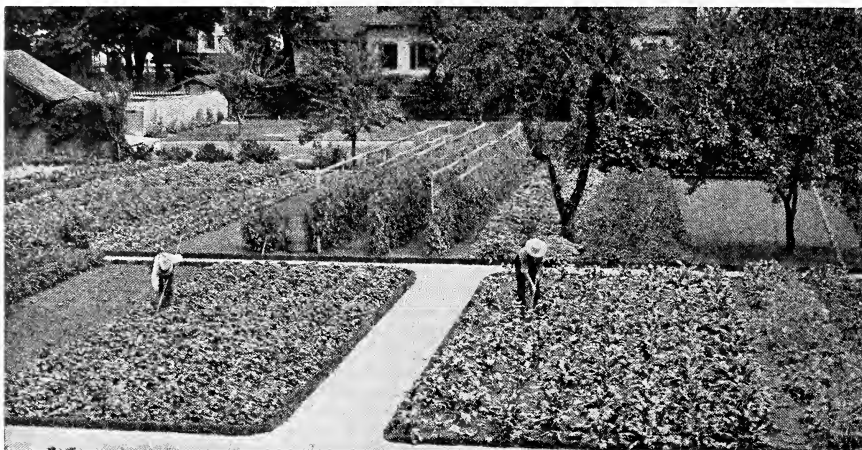
English. This rich and fine-flavored nut is quite hardy with us, and makes a vigorous growth; well worthy of cultivation.

Japan Walnuts

Juglans Sieboldii. This species is found growing wild in northern Japan and is hardy as an oak. In form, the nuts are similar to a butternut, and are produced in extreme abundance, in clusters of fifteen to twenty. The meat is sweet, of the very best quality. The trees grow with great vigor, need no pruning and bear young. Having an abundance of fibrous roots, they transplant safely.



Pecan

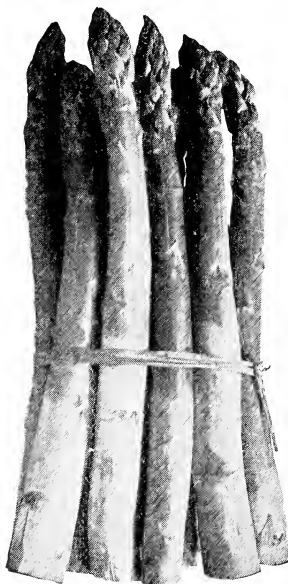


The Vegetable Roots

The vegetable roots listed here grow readily with very little care and should have a place in every garden. A few roots will supply the average table and if more is grown than is needed, the surplus can generally be sold in the neighborhood or at market for a good price.

Asparagus

One of the earliest and finest of vegetables; the delicious tender tips are much in demand in early spring. To plant, dig the ground deep, spading in plenty of well-rotted manure; plant the roots 10 to 12 inches deep, and about a foot apart in the rows. As a market vegetable, Asparagus is among the most profitable of any, and we now have an extra-fine supply of strong roots to offer commercial growers. When planting extensively, the ground should be well enriched with rotted manure, and then plowed and harrowed till very mellow. Rows should be 4 to 5 feet apart, and furrowed 10 to 15 inches deep; plants should be located from 15 to 20 inches apart, and covered with 3 to 4 inches of mellow soil. As they grow, cultivate and pull in more soil, working the same as celery. Cultivate regularly to keep out grass and weeds.



Barr's Mammoth Asparagus

Conover's Colossal. An old and generally satisfactory variety. The shoots are large, very tender and good.

Barr's Mammoth. Very valuable as a market variety. Its handsome light green color and large size make it very attractive, so that it sells readily at a higher price than other varieties. It makes no shoots too small for marketing, and much time is thus saved in cutting and bunching.

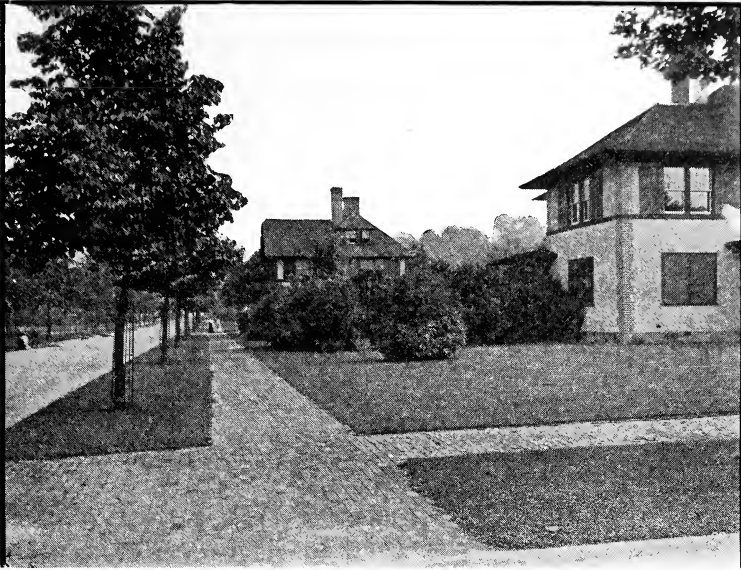
Giant Argenteuil. Extensively grown in France, but has become adapted to our soil and climate. It is noted for its earliness, productiveness and immense size of stalks. Remarkably healthy.

Palmetto. Of southern origin. Very early; quite large; very prolific; uniform in size and of good quality.

Rhubarb, or Pie-Plant

Another very early vegetable; the thick, tender stalks provide the best of material for pies and tarts, and are excellent for canning. Plant the roots in rich, mellow soil, worked deep.

Linnæus. By far the best of all varieties.



Lindens must be included when shade and street trees are discussed. Rapid growth, dense foliage, small but fragrant flowers, are points distinctly in their favor. European and American varieties are equally desirable. (See page 27.)

Ornamental Department

No matter how simple the home, it is to the best interest of every owner to "dress up" the grounds in a way that will make it as attractive and homelike on the *outside* as the good housekeeper loves to have it in the *inside*.

The bare, unattractive "front yard" is fast becoming a thing of the past, as people are learning how easy it is to entirely change the appearance of the home with trees, shrubs, and vines—a few dollars' worth is often all that is necessary.

We pay special attention to the growing of trees that will make homes attractive, and invite your attention to the following lists of Deciduous Trees and Shrubs, Hedge Plants, Evergreens, Roses, Vines, etc. The descriptions and illustrations will aid you in selecting suitable varieties and our salesmen will gladly offer helpful suggestions if desired.

Deciduous Trees and Shrubs

Plant at any time in the spring after the frost is out of the ground, until the foliage starts; in autumn, any time after wood and foliage have ripened, until the ground freezes. Cut all bruised and broken roots off smoothly beyond the point of injury and prune back the top to correspond with the root-pruning necessary.

Upright and Weeping Trees

ACER (Maple). The Maples are clean and vigorous in growth and adapt themselves to many soils. Their outlines are shapely and graceful and the foliage usually colors brilliantly before it falls. All the varieties here noted are desirable lawn and street trees.

A. dasycarpum (White or Silver Maple). Named from the shining undersurface of its leaves. Large and rapid-growing.

Acer dasycarpum Wieri laciniatum (Wier's Cut-leaved Silver Maple). Very graceful and elegant in habit; finely cut leaves. The growth can be cut back, to render it more compact on small grounds.

A. Negundo (Ash-leaved Maple). Of quick growth and irregular, spreading form, improved by close pruning. Leaves pinnate. Also called Box Elder.



Avenue of Norway Maples (Acer platanoides)

Acer platanoides (Norway Maple). A large, handsome tree of vigorous growth, with broad, deep green leaves. Landscape men and foresters consider this America's finest tree for streets and avenues.

A. platanoides Schwedleri (Schwedler's Norway Maple). A conspicuous variety, with bronze-red or purple foliage.

A. pseudoplatanus (Sycamore Maple). A picturesque European tree, with large, shining leaves and smooth bark of a light gray color. The growth is rapid.

A. rubrum (Red or Swamp Maple). Bright red-and-orange blossoms in the spring and brilliant crimson foliage in autumn. Excellent for moist situations.

A. saccharum (Rock or Sugar Maple). A stately native American tree of noble form. Leaves are dark green and very handsome, turning brilliant red and orange after frost, thus making it one of the most colorful and picturesque trees in the landscape. Perfectly hardy; best adapted to northern planting.

Japanese Maples

The Japanese Maples are of dwarf habit and are varied in their foliage. Some have leaves of rich bright hues and others are deeply cut. Whether planted singly or in groups they are effective and beautiful.

ACER polymorphum. The most vigorous of the type; forms a small, shrubby tree with various shades of color on the young growth; foliage small, deeply lobed, changing to the most brilliant and gorgeous tints in autumn.

A. polymorphum aureum (Golden Japanese Maple). The leaves retain their light yellow color with little variation throughout the summer. One of the best and most effective in a group.

A. polymorphum atropurpureum (Blood-red Japanese Maple). The brightest and most constant in color of the red-leaved sorts.

A. polymorphum atropurpureum dissectum (Cut-leaved Purple Japanese Maple). Branches crimson; leaves finely cut, crimson or dark purple.

ÆSCULUS (Horse-Chestnut). Popular street and lawn trees, with round, dense heads of deep green leaves, spangled with large flower-clusters in early spring.

Æ. Hippocastanum (European Horse-Chestnut). Flowers in large panicles; white with touches of red.

Æ. Hippocastanum alba flore-pleno. Large, white, double flowers.

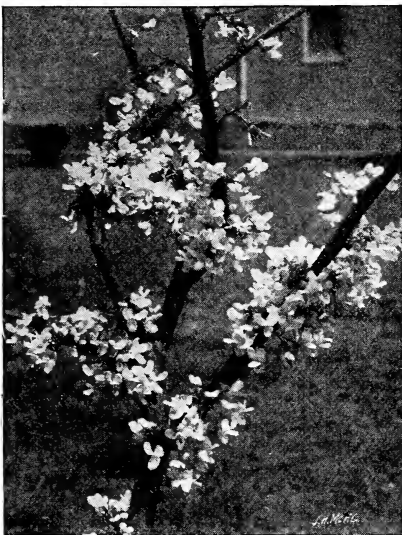
Æ. Hippocastanum rubicunda. A tree of medium size, with bright red, showy flowers. Very distinct and beautiful when in flower.

BETULA (Birch). The beauty of the Birches lies in their classic grace and elegance, silvery bark, light sweeping branches and airy foliage. They flourish even in the poorest soils and most exposed situations.

B. alba (White Weeping European Birch). Moderate in growth, assuming an elegant drooping habit in four or five years. One of the hardiest and most useful trees in cultivation, growing quickly and withstanding exposure well.

B. pendula laciniata (Cut-leaved Weeping Birch). Famed for its beauty and graceful habit. The growth is tall and slender, yet vigorous, the branches light and drooping; leaves delicately cut.

CATALPA Bungei (Chinese Catalpa). A curious dwarf tree that grows but 8 to 10 feet high and twice as broad. Top-grafted on tall stems, it is quite as effective for lawn and terrace decoration as the tender and more expensive bay trees. The great, glossy leaves are laid with odd precision.



Cercis canadensis (Red-Bud)



Catalpa Bungei

Catalpa speciosa. The large heart-shaped leaves of the Catalpas and their showy flower panicles give them quite a tropical appearance. *C. speciosa* is of very rapid growth, flowers earlier than most other sorts, is perfectly hardy and a handsome tree. The wood is very durable and takes a fine polish.

CERASUS (Cherry). The ornamental race of Cherries grows fast in public favor as its good qualities become better known. The drooping varieties are especially pretty for small grounds.

C. avium albo-plena (Double-flowering Cherry). Clusters of white flowers, as double as little roses, cover the tree thickly in May, transforming it into an object of the greatest beauty.

C. japonica pendula (Japanese Weeping Cherry). Feathery and graceful, but strong in growth, forming a dense, drooping head; flowers white, single; fruit red; an attractive tree.

C. rosea pendula. A weeping form of the Japanese Cherry, and one of the most beautiful weepers in cultivation. Grafted on tall stems, the branches bend gracefully to the ground. In early May these branches are clothed with single, rosy white flowers, which are particularly pretty in bud.

CERCIS canadensis (Judas Tree, or Red-Bud). A small-growing tree, covered with delicate pink flowers before the leaves appear. Because of the profusion of bloom the Red-Buds are conspicuous objects in the spring landscape, making the shrubbery border, the woodlands, and the hillsides brilliant with color, particularly where evergreens form the background.

CHIONANTHUS virginica (White Fringe Tree). A small, hardy, native tree, of rounded outline, blooming in May and June. Flowers clustered, white, narrow-petaled, resembling bunches of pure white silken fringe or lace, drooping in a fragrant mist over the broad leaves.

CORNUS (Dogwood). The Dogwoods flower very early, and their large, conspicuous flower-bracts render them showy objects among other still leafless clumps of trees and shrubs. The shrubs are of graceful form and make a very effective planting—especially when placed in front of larger trees, such as evergreens of solid, deep color.

C. florida (White-flowering Dogwood). Irregular and spreading form. Involucre large, four-petaled, white. In spring, when bursting buds first cast a tinge of verdure through the landscape, its large white flowers are quite showy and effective, making it very desirable.

C. florida rubra. A red-flowered form, which blooms when quite young and is very bright and showy. The leaves turn a magnificent crimson in autumn; the flowers are of a rose-red, shading to a lighter hue toward the edges of the petals.

CYTISUS Laburnum (Golden Chain). A small handsome tree or shrub, with smooth, shining foliage and long, drooping racemes of beautiful golden yellow



White-flowering Dogwood

Cytisus Laburnum, continued
flowers. Blooms in June, after the grand spring inflorescence of other shrubs is over.

FAGUS (Beech). Even while young the Beeches are remarkable for their beauty and with age spread into grand trees. Their leaves are light, glossy green.

F. sylvatica (European Beech). A tall, noble tree, of slower growth and more compact form than the American; retains its foliage very late, or sometimes all winter. One of the best Beeches for general ornamental planting.

F. sylvatica incisa (Cut-leaved Beech). Light, deeply cut foliage. Erect and free-growing; of rare beauty.

F. sylvatica pendula. The straight trunk and the drooping, spreading branches of this tree are hidden under a veil of rich luxuriant foliage, which invests it with wonderful grace.

F. sylvatica purpurea Riversi (Rivers' Smooth-leaved Purple Beech). The best of the Purple Beeches. Compact and symmetrical; leaves crimson in spring, changing to dark purple at maturity.

FRAXINUS (Ash). The Ash trees are all of rapid growth, and quickly form large specimens. They are hardy, ornamental and valuable, and bear lateral racemes of inconspicuous greenish yellow or whitish flowers.

F. americana (White Ash). A native tree of medium height, with broad, round head and clean trunk.



Purple Beech

KÖLREUTERIA paniculata. Has panicles of showy yellow flowers a foot long in summer when other tree-bloom is scarce; in fall its leaves are richest crimson; in winter the characteristic growth and skyline are particularly striking. A most beautiful small tree.

LARIX (Larch). Slender, graceful trees, generally of drooping habit.

L. europæa. Rapid-growing, of elegant pyramidal habit, with small, drooping branchlets of tender, delicate green, deepening toward summer.

LIQUIDAMBAR styraciflua (Sweet Gum or Bilsted). One of our finest American trees. Leaves bright green, glossy and star-shaped; bright crimson in autumn. Of medium size and moderate growth.

LIROIDENDRON Tulipifera (Tulip Tree). Another magnificent native; large tulip-like flowers and broad, glossy, fiddle-shaped leaves. Tall and pyramidal; transplants best when small.

The Magnolias

The glossy, tropical foliage of the Magnolias, and their splendid, fragrant flower-cups have helped to scatter the race widely wherever it will grow. All Magnolias should be transplanted early in spring, taking care to preserve the fibrous roots, and to protect them from even temporary exposure.

It would be hard to find a finer group of flowering trees than the Magnolias. We



Flowers of Tulip Tree

have a fine assortment of varieties consisting both of the native and Chinese sorts, giving a fine selection as to form of tree and color of flower.

M. acuminata (Cucumber Magnolia). A tall tree, with creamy yellow flowers and cucumber-shaped fruits, which turn crimson as they ripen.

M. glauca (Sweet Bay). A small native tree, with shining foliage and very sweet white flowers borne in profusion in May.

M. tripetala (Umbrella Tree). A free-growing and somewhat straggling tree, with lanceolate leaves from 1 to 2 feet long and white flowers 4 to 6 inches in diameter, with a slight but not altogether agreeable perfume.

CHINESE MAGNOLIAS

M. Lennei (Lenne's Magnolia). Blooms in May, and frequently again in late September. Flowers dark rose without and pearly white within. A strong grower, making a grand display.

M. Soulangeana. Cup-shaped white and purple flowers, from 3 to 5 inches across.

M. speciosa. Flowers a little smaller and later than *M. Soulangeana*, otherwise the same.

M. stellata (Halleana) (Hall's Japanese Magnolia). Dwarf and bushy. Semi-double, white starlike flowers, delicate and fragrant.



Quercus palustris (Pin Oak)



Salisburia adiantifolia (Ginkgo)

MORUS tatarica pendula (Tea's Weeping Russian Mulberry). A very graceful weeping tree; foliage handsomely cut, glossy and green; exceedingly hardy. A most desirable tree for small lawns.

PLATANUS orientalis (Buttonwood). A valuable tree for city streets; thrives well in any kind of soil and withstands smoke and gas. Remarkably free from disease and grows to massive proportions. Highly ornamental and graceful.

POPULUS (Poplar). Leaves are glossy and abundant, and all the species grow quickly into trees of fine contour.

P. fastigiata (Lombardy Poplar). The well-known, lofty, spire-like tree; erect and rapid in growth.

PYRUS ioensis flore-pleno (Bechtel's Double-flowering Crab Apple). A very showy double variety, originating in the West. The handsomest ornamental flowering Crab to be had.

QUERCUS (Oak). A kingly race of trees—strong, rugged, towering and majestic. The loftier species are suited only to large grounds, but for small yards there are less aspiring sorts.

Quercus coccinea (Scarlet Oak). Its foliage in the fall is of a sparkling red, making a beautiful object in the landscape. Grows tall, pyramidal in shape, and thrives well under all conditions.

Q. palustris (Pin Oak). One of the quickest growing of Oaks, reaching a height of 60 feet, and forming a desirable addition to the park. Regarded as one of the best of the Oak family.

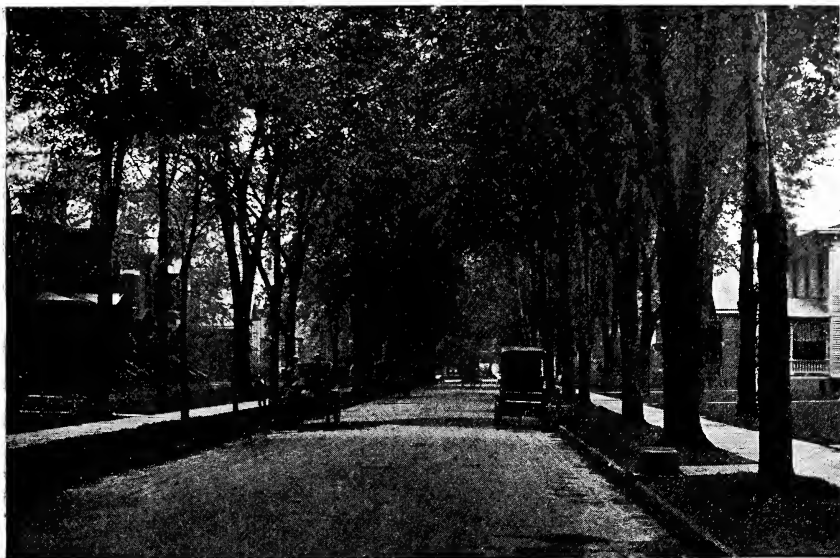
Q. rubra (Red Oak). One of the largest-leaved American species. A rapid grower, and a valuable street tree.

SALISBURIA adiantifolia (Ginkgo, or Maidenhair Tree). One of the most beautiful of lawn trees. A native of Japan. Of medium size, rapid growth, and rich, glossy fern-like foliage; rare.

SALIX (Willow). The Willow's soft, light masses of foliage are very effective; trees beautiful, hardy and rapid-growing.

S. babylonica (Babylonian Weeping Willow). A large tree; branches drooping.

S. vitellina aurea (Golden Willow). A large and stately tree, conspicuous at all seasons, but particularly in winter, on account of its yellow bark.



Avenue of Elms

TILIA (Linden or Basswood). The Lindens grow rapidly to large size, and their rounded, luxuriant masses of foliage make them very much sought for as street and shade trees.

T. americana (American Linden; Basswood). Large, cordate leaves and inconspicuous, delicately fragrant flowers.

T. argentea (Silver-leaved Linden). Rather smaller than the American. The leaves are downy and white underneath.

T. dasystyla (Crimean Linden). Leaves tough and leathery, dark glossy green above and pale beneath, with tufts of brown hairs on the axils of the principal veins; bright yellow bark in winter.

T. europæa (European Linden). Of pyramidal form. Flowers fragrant; leaves large and dense.

Tilia platyphyllos (Large-leaved Linden; Lime). Fine, strong-growing tree with larger foliage than the English. Thrives in bleak places along the seacoast.

ULMUS (Elm). A rival of the oak, with more stately grace, but less rugged strength and picturesqueness.

U. americana (American White Elm). The noble spreading tree of our own forests; grows very large.

U. campestris (English Elm). Round-topped and sometimes open-headed tree. Often used for avenues. Foliage dark green, remaining several weeks longer than that of the Americana, and is more delicately cut.

U. Wheatleyi (Guernsey or Cornish Elm). A fine tree with short ascending branches forming a dense, narrow pyramid; leaves rather small, broad and dark green.

The Hedge Plants

Described on pages 28, 30, 34, 35 and 36

DECIDUOUS. California Privet, Purple Barberry, Thunberg's Barberry.

EVERGREEN. Arborvitæ, Hemlock Spruce, Norway Spruce, Retinospora.

NOTE.—We particularly invite the attention of our patrons to the very favorable conditions which prevail here for the growing of trees and plants. Chester County, Pennsylvania, is well known as one of the best farming sections of the United States, and this fertile soil, together with our improved methods of developing first-class trees, enables us to produce stock that anyone may well be proud to plant. Trees and plants from Willowdale Nurseries will succeed well when planted either north or south of us.



Foundation Planting of Shrubs

The Deciduous Shrubs

The shrubs described in the following list are fine for hedges, screens, etc., for planting about the house or veranda, and for many other purposes aside from those to which shrubs are usually put.

ALTHÆA. See Hibiscus.

AMYGDALUS (Double Pink- and White-flowering Almond). Pretty dwarf shrub, with double pink or white flowers growing thickly along the stem; early flowering. Two varieties.

AZALEA amœna. See Evergreen Shrubs.

A. Hinodigiri. See Evergreen Shrubs.

BERBERIS Thunbergii. One of the most effective plants in autumn, after most other deciduous shrubs are bare. Its small oval leaves then assume superb crimson hues and the slender branches droop beneath their load of bright red berries, which hang on till late in the winter. The bush is as thorny as a gooseberry and is one of the best plants for ornamental hedges. It can be clipped to a formal design, or allowed to grow in natural fashion.

B. purpurea. Rich purple foliage and fruit. Striking and ornamental.

BUDDLEIA Veitchiana (Summer Lilac; Butterfly Bush). A beautiful shrub from Japan, bearing sweet-scented flowers of a rosy lilac color; blooms in great profusion all summer.

CALYCANTHUS floridus (Sweet-scented Shrub; Carolina Allspice). Native; hardy. Leaves large and glossy; flowers double, chocolate-colored, fragrant.

CLETHRA alnifolia (Sweet Pepper Bush). Low-growing; flowers in long spikes, clear white and fragrant, opening in August.

CORNUS (Dogwood). Some of this family of plants are desirable for their handsome, variegated foliage, some for their showy bloom, others for their bright red bark, which greatly enlivens the summer or winter landscape.

C. mas (Cornelian Cherry). A large-growing shrub bearing clusters of bright yellow flowers in spring before the leaves appear; later, bears large scarlet fruit.

C. sanguinea (Red-branched Dogwood). A native species with clusters of large yellow flowers; very conspicuous and ornamental in winter, when the bark is blood-red. Shows well against the snow.

C. sibirica (Siberian Dogwood). Similar to *C. sanguinea* in color of bark, but a different shade of red. Flowers white, in clusters, followed by pale blue berries. Both varieties are desirable for grouping.

CORYLUS Avellana purpurea (Purple-leaved Filbert). A very conspicuous shrub, with large purple leaves. Distinct and fine. Produces good fruit.

CRATÆGUS. Thorn. These shrubs make good hedges, growing quite dense and when in bloom are very attractive. If you like to have the birds around your place, the thorny branches will furnish protection and nesting-places.

C. coccinea (Scarlet-fruited Thorn). A fine native variety; blooms in May, producing white blossoms, succeeded by scarlet fruit; large foliage.

C. Oxyacantha Paulii (Paul's Double Scarlet Thorn). A tree of fine habit, with rich, luxuriant foliage; flowers much larger than the double red, of a deep crimson color, with scarlet shade; very double.

C. Oxyacantha fl.-pl. (Double White Thorn). A very attractive variety on account of both foliage and flowers; the flowers are small, double white.

DIERVILLA (Weigela). The flowers of the Weigelas are large and trumpet-shaped and vary through different shades and markings from pure white to red. They bloom in June after the lilacs are gone.

D. candida. Of vigorous growth, with large, pure white flowers, produced from June until autumn.

D. hybrida, Eva Rathke. One of the finest of the Diervillas. Of erect form and vigorous habit. In spring and early summer it is covered with a profusion of deep carmine-red flowers of large size.

D. rosea. A rare Chinese shrub; erect and rounded; bright rose-colored flowers.

D. rosea aurea variegata (Variegated Weigela). A neat, dwarf shrub, valuable for the clearly defined variegation of green, yellow and pink in its leaves; very effective and useful; flowers similar to *D. rosea*, delicate rose and pink. One of the finest variegated-leaved shrubs.

D. Van Houttei. Deep crimson flowers that cover the plant.

DEUTZIA. The most beautiful and deservedly popular of all our flowering shrubs. They are hardy, of fine habit, and flower profusely in the latter part of June, the racemes being long and graceful.

D. crenata alba fl.-pl. (Double White-flowering Deutzia).

D. crenata, Pride of Rochester. Flowers larger than the above; white and double, the outer petals being flushed with rose.

Deutzia gracilis. A pretty dwarf form, with pure white flowers that open quite early.

D. Lemoinei (Lemoine's Deutzia). Snow-white flowers borne abundantly along the slender branches in May.

EUONYMUS (Burning Bush; Strawberry Tree; Spindle Tree). These shrubs have crimson fruits, with scarlet arils and dark green leaves and stems; foliage of attractive form, assuming brilliant shades in autumn. Planted against a clump of evergreens, they give brilliant effects. Three varieties: **Americana**, **Atropurpurea**, and **Europæa**.

FORSYTHIA (Golden Bell). Shrubs with deep green leaves and bright yellow flowers all along the slender stems; very early-flowering, blooming even before the foliage starts.

F. Fortunei (Fortune's Forsythia). April. A spreading bush, with dark, shining foliage, which has a purplish tint in autumn. Deep yellow flowers.

F. intermedia (Intermediate Forsythia). Erect in growth, somewhat slender; very profuse in bloom.

F. suspensa (Weeping Golden Bell). April. The long, willowy branches arch gracefully over to the ground and are covered to the tips with trumpet-shaped yellow flowers.

F. viridissima (Golden Bell). Very green leaves. It is one of the first shrubs to bloom in spring, bearing bright yellow flowers in profusion before the leaves appear.



Deutzia crenata alba fl.-pl.



Hydrangea paniculata grandiflora

HIBISCUS (Althea; Rose of Sharon). An old and well-known shrub, that blooms in autumn when other flowers are scarce. Double and single flowers; best varieties and color.

DOUBLE WHITE

H., Jeanne d'Arc. Pure white; very full, and superior to any double white known.

DOUBLE RED AND PINK

H., Boule de Feu. Deep red; double.

H. Leopoldii plena. Large; double, flesh-colored flowers, shaded with rose; foliage lacinated.

H. speciosa. Double; rosy pink.

H. violacea. Large-flowered; reddish violet.

DOUBLE LILAC AND BLUE

H. Ardens. Rich lilac; double.

H. foliis variegatis. A conspicuous variegated-leaved variety. Double purple flowers. One of the finest variegated shrubs.

SINGLE WHITE

H., Lady Stanley. One of the finest variegated flowering sorts.

H. totus albus. White; single.

SINGLE RED

H. rubus. The darkest red of the single Altheas.

SINGLE LILAC AND BLUE

H. cœlestis. Blue; single.

HYDRANGEA arborescens grandiflora (American Everblooming; Hills of Snow). The large flowers are pure white, changing in autumn to green, same shade as the leaves. Blooms continuously from early June until end of season.

H. Nikko, Blue. A Japanese variety that is entirely different from any other sort. The blooms are distinctly blue; borne in large flat panicles which lend themselves readily to massed color effects. Quite hardy; does not require any protection.

H. otaksa. A dwarf variety which produces immense flowers of a pink tinge. Requires protection during the winter.

H. paniculata grandiflora. Autumn-flowering; as hardy as an oak; flower-heads enormous, pure white, borne in great profusion and turning to pink and remaining in perfection until late fall. One of the best hardy shrubs.

H., Thomas Hogg. Pure white; a free bloomer of dwarf habit. A good variety for growing in pots or tubs.

ILEX verticillata (Black Alder, or Winterberry). A splendid hardy shrub with brilliant red berries, which persist upon the branches until midwinter. 6 to 10 ft.

KERRIA (Corchorus). These are quite hardy, although occasionally injured by the winter. Attractive bright yellow flowers.

K. japonica fl.-pl. (Double-flowering Corchorus). An erect grower, with pale green bark and very double yellow flowers. Blooms profusely from the last of June until autumn, with showy globular flowers.

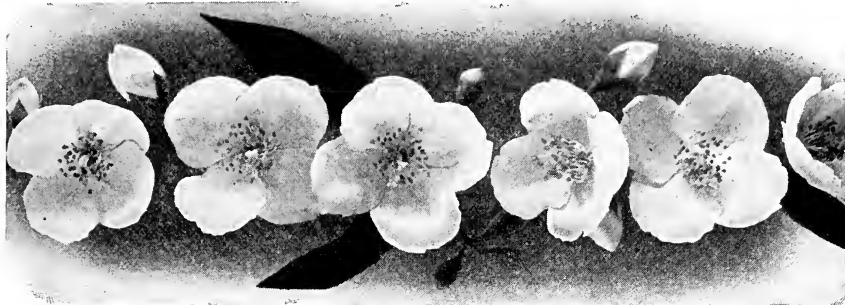
LIGUSTRUM amurense (Amoor River Privet). Lustrous, dark green leaves; small white flowers in panicles. Makes a strong growth; if left untrimmed will attain a height of 8 to 12 feet. Will not winter-kill; very hardy.

L. Ibota (Chinese Privet). One of the most beautiful of the Privets both in flower and leaf. Hardier than the California and will not freeze out. Makes a handsome and practical hedge.

L. ovalifolium (California Privet). Popular hedge-plant, forming beautiful live fences of great density. Untrimmed, it will grow from 8 to 12 feet high; it has attractive, glossy dark green foliage, not subject to insects.

L. Polishii (Polish Privet). Makes a compact, erect growth. Foliage is bluish green and lustrous; nearly evergreen. Extra hardy.

L. Regelianum. A low, dense shrub, with almost horizontal spreading pendent branches. Leaves are oblong or obovate.

*Philadelphus coronarius*

LONICERA fragrantissima. An irregular spreading shrub, bearing in great profusion cream-white, exceedingly fragrant flowers very early in spring. Nearly evergreen habit.

L. Morrowi. A new sort from Japan, bearing cream-white flowers, followed later by a great profusion of amber and red fruit, which is its crowning autumn glory.

L. tatarica (Tartarian Honeysuckle). Red or pinkish flowers, followed by orange-scarlet berries.

L. tatarica grandiflora. Large, bright red flowers, striped with white.

PHILADELPHUS (Mock Orange.). All varieties of this group flower in June after the Weigela. If left to develop naturally, all but the dwarf sorts would grow from 12 to 15 feet high, but can be kept in compact shape by pruning. They bear their fragrant white flowers profusely and are general favorites.

P. coronarius. Flowers white, borne in rather dense clusters, highly perfumed; very early in opening.

P. foliis aureis (Golden-leaved Mock Orange). Leaves bright yellow all season—a pretty contrast for purple-leaved shrubs.

P. grandiflorus. Flowers in clusters, pure white and showy, late, slightly fragrant.

P. Gordonianus. July. A very late bloomer, and valuable for this quality. Large, fragrant flowers.

PRUNUS Pissardii (Purple-leaved Plum). An elegant, tree-like shrub, with leaves of lustrous crimson when young, changing to purple with age. The bright color is more constant than in any other shrub of its class. Flowers small, white, single, abundant in spring.

PYRUS japonica. A very showy and popular shrub, which blooms profusely in early spring; flowers dazzling scarlet, pink and white. Should be in every collection of shrubs; also makes an excellent and very showy hedge.

RHUS Cotinus (Purple Fringe; Smoke Tree). So called from the cloud of purple, filmy hair-like flowers which cover it thickly in summer. Of spreading habit; 10 to 12 feet high.

SAMBUCUS (Elder). A genus of large shrubs of the easiest cultivation, attractive both in flower and fruit.

S. nigra aurea (Golden Elder). This is a very attractive form of the common European Elder, with bright yellow leaves.

SPIRÆA (Meadowsweet). Low shrubs, remarkable for their profuse blossoming and easy culture. Neat, rounded habit.

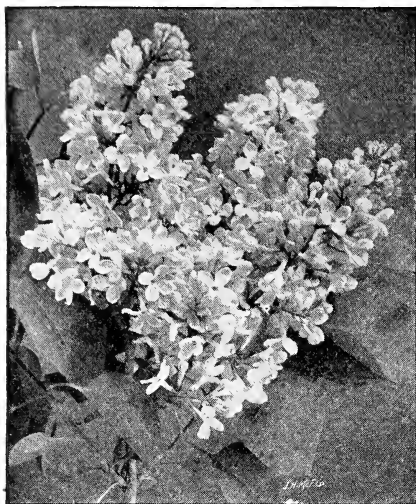
S. Bumalda. Dwarf; vigorous; blooms in midsummer and autumn. Flowers rose-colored; leaves narrow.

S. opulifolia aurea (Golden-leaved Spirea). Conspicuous and bright in effect. Flowers white, double; leaves yellow-tinted.

S. prunifolia flore-pleno (Plum-leaved Spirea; Bridal Wreath). Flowers like double daisies, growing in long, thick wreaths. Blooms for a long time in May.

S. Reevesi (Lance-leaved Spirea). Narrow leaves; plant covered thickly with handsome, large, white flower-clusters.

*Spiraea Van Houttei.* See page 32

*Syringa vulgaris*

Spiraea Thunbergii (Thunberg's Spirea). Dwarf; early flowering; valuable for forcing.

S. Van Houttei. Undoubtedly the best of all Spireas. In early June the plant is covered with a mass of large white flowers.

S. Watereri (Anthony Waterer Spirea). It is of dwarf, dense habit, bearing a profusion of rose-pink flowers of a shade peculiar to itself, blooming the entire summer. This is a decided acquisition, and one of the most desirable varieties.

SYRINGA (Lilac). Lilacs of some sort are found in almost every garden, so that their beauty and general characteristics are well known. They bloom in May.

S. Josikæa. A fine late bloomer, with bluish purple flowers; less fragrant than some others.

S. persica (Persian Lilac). A medium-sized shrub, with small leaves and large panicles of small, fragrant, bright purple flowers.

S. persica alba. Delicate white flowers, shaded with purple.

S. villosa. A new Japanese species, which blooms two or three weeks after other Lilacs are done. Flowers in large, spreading panicles of a delicate lilac shade. Scarce and valuable.

S. vulgaris. The common purple Lilac.

S. vulgaris, Ludwig Spaeth. A new hybrid form introduced from Germany. The flowers and clusters are very large, fine, and dark in color.

S. vulgaris, Mme. Lemoine. A new variety with double white flowers.

Syringa vulgaris, Marie Legraye. Superb, creamy white flower-plumes of great size, bush dwarf. Extra-choice.

S. vulgaris, Souvenir de Louis Spaeth. Most distinct and beautiful variety; trusses immense; very compact florets; very large; deep purplish red.

S. vulgaris, President Grevy. A beautiful new variety, with large, double flowers in clusters 10 inches long and blue in color.

TAMARIX africana. Leaves graceful and feathery, like asparagus. In late May it bears pink flowers.

VIBURNUM Opulus (Cranberry Tree). White flowers in summer, with attractive red berries in autumn. The berries hang until midwinter or later, providing food for birds.

V. Opulus sterile (American Snowball). Very beautiful and popular; flowers snowy white, borne in large balls in early summer.

V. plicatum (Japan Snowball). A new variety from north China. Of moderate growth, with handsome plicated leaves and globular heads of pure white flowers. It surpasses the old variety in several respects. Its habit is better, flowers whiter and more delicate. One of the most valuable flowering shrubs.

For hints on spraying to control scale, see page 44.

*Viburnum plicatum*

*Specimen Norway Spruces*

The Evergreens

The all-the-year-round color of the evergreens is the quality most valuable in them, while their use as sheltering windbreaks cannot be overestimated. The prevailing color which they give to their surroundings is deep-toned, but if the bright-leaved sorts, now plentiful, are planted among somber ones, they greatly enliven the effect.

Evergreen trees and shrubs can be planted later in the season than those which are deciduous. May is, perhaps, the best time for doing this work in spring; August and September are the months for autumn planting.

ABIES balsamea (Balsam Fir). The useful common Fir, of subtle and health-giving odor; a medium-sized tree.

A. concolor (White Fir). A native species, with long, broad foliage, bluish above and silvery beneath. Of all Fir trees, it best withstands heat and drought. Very hardy and grows rapidly.

A. Douglasii (Douglas' Fir). A large, conical tree, with smooth bark and light green foliage, glaucous beneath. A rapid grower, but not so hardy as some others.

A. Douglasii elegantissima glauca (Blue Douglas Fir). A beautiful type of the Fir, rivaling in color the blue spruce but of finer texture; desirable.

A. Nordmanniana (Nordmann's Silver Fir). Majestic and symmetrical in form, with massive, plummy branches of dark green foliage, showing its light undersurface in silvery ripples.

A. Veitchii (Veitch's Fir). From the mountains of Japan. Leaves bright green, silvery white below. A very hardy and beautiful tree.

CEDRUS. The True Cedar. This genus is very popular in the South, where they are all hardy and make stately trees. The following are reasonably hardy:

Cedrus atlantica glauca (Mount Atlas Silver Cedar). A variety with beautiful glaucous bluish green foliage. Grows more compact and is harder than the species.

C. Libani (Cedar of Lebanon). Reasonably hardy in the Middle States. Makes a regular conical shape when young, but assumes a perfect tubular form with age, with strictly horizontal branches, therefore should be given space to develop properly.

CUPRESSUS Lawsoniana (Lawson's Cypress). A beautiful evergreen from the Pacific Coast. A rapid grower, columnar in shape; bluish green foliage.

JUNIPERUS. This genus includes a number of trees, some of which are known as Cedars. Leaves awl-shaped, in whorls.

Juniperus chinensis alba-variegata. Dwarf; conical; steel-gray, prettily flecked with touches of green, making it a prominent figure in a group of evergreens.

J. chinensis aurea (Golden Chinese Juniper). A beautiful, erect, pyramidal plant, compact and stately; very desirable in groups where color contrast is desired.

Juniperus chinensis Pfitzeriana. A medium to large grower. The handsomest green Juniper of them all; dense in center, spreading to pointed, feathery and graceful foliage.

J. hibernica (Irish Juniper). The trees form a tall, dense cone of silvery green.

J. japonica (*J. chinensis japonica*; Japanese Juniper). One of the most desirable of all the Junipers. It adapts itself to a great range of climate, temperature, and soil. A distinct variety, with bright green foliage which does not change during winter; pyramidal and compact growth.

J. japonica aurea (Golden Japan Juniper). Growth the same as above; attractive golden color and spreading low habit.

J. Sabina (Savin Juniper). Spreading or procumbent shrubs, rarely with erect stem. Branchlets rather slender. Leaves needle-shaped, usually dark green.

J. stricta. Dwarf; silver-blue; compact and of fine form; its color and shape contrast greatly with the green and golden kinds.

J. virginiana (Red or Virginia Cedar). A native form, very common in New England. Tapering, bright, rich green foliage. Bark on trunk and branches reddish brown. Thrives in dry soil.

J. virginiana Cannartii. Erect to pyramidal in form; plant of fine texture and good green color.

Juniperus virginiana glauca (Blue Cedar). Very erect and graceful. Beautiful foliage, holding its color throughout the year. Should be extensively planted.

J. virginiana Schottii. Same in habit and growth as *J. virginiana glauca*, but green in color; very popular.

PICEA (Spruce). The Spruces have fine needle-shaped leaves which clothe the twigs evenly or in ranks. All are hardy, and transplant readily.

P. alba (White Spruce). Of medium size; pyramidal; leaves silver-gray.

P. canadensis (Hemlock Spruce). The graceful common Hemlock, with delicate, dark foliage.

P. excelsa (Norway Spruce). Tall and rapid-growing; useful for hedges, shelter-belts, etc.

P. excelsa pyramidalis (Pyramidal Spruce). A very remarkable variety, strictly upright in its growth; and resembling the Lombardy poplar in habit; in fact, the arrangement of its branches is exactly the reverse of those on the type. It is hardy, easily grown and increases rapidly in size.

P. orientalis (Eastern Spruce). A native of Armenia, where it forms dense forests on the mountainsides. It is not so large as the Norway Spruce, but very dense in structure, with numerous short, sharp, deep green leaves. The outline is strictly pyramidal, with less of a drooping character than the Norway.



Picea pungens Kosteri (Koster's Blue Spruce)

Picea pungens (Colorado Blue Spruce).

A tree of medium size, with rich steel- or sage-blue tints on its glossy foliage. One of the hardiest and most beautiful.

P. pungens Kosteri. An extremely blue sort, so unusual in color that it must be carefully placed lest it accentuate too strongly the spot where it is planted.

PINUS (Pine). The hardy, robust habit of the Pine, and soft, plume-like effects produced by its long, slender leaflets, make it of great service in general planting.

P. austriaca (Austrian Pine). Strong, spreading and rapid-growing; of especial value.

P. Mughus (Dwarf Mugho Pine). One of the best dwarf bushy forms.

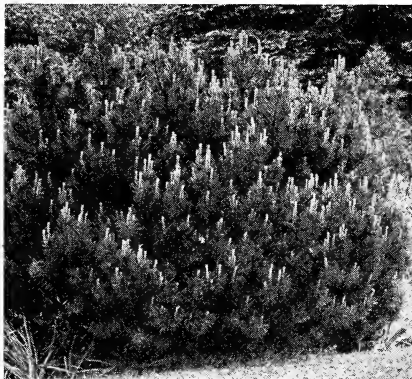
P. Strobus (White or Weymouth Pine). A beautiful native of lofty growth, but of fine shape, even when small; foliage silvery green.

P. sylvestris (Scotch Pine). A native European species, with strong branches and short, stiff, bluish green foliage.

RETINOSPORA (Japan Cypress).

The Retinosporas are unusually attractive on account of their delicacy and the variation shown in the tints of their foliage. They afford a pleasing contrast in groups of evergreens. They are very desirable in all ornamental planting, especially in producing formal effects; also for planting in window-gardens and vases. They are of rather recent introduction, and are a valuable acquisition. Most of the Retinosporas need shearing occasionally while small, to give them a dense, symmetrical habit.

R. filifera (Thread-like Retinospora). An elegant drooping form, especially noticeable in a group of Conifers. The thread-like, pensive branchlets are very graceful, and are furnished with small, sharp-pointed, glossy green leaves.



Mugho Pine



Retinospora squarrosa Veitchii

Retinospora filifera aurea (Golden Thread-branched Retinospora). Foliage is of a bright golden yellow, forming a pleasing contrast to other varieties. Plant is dwarf in habit and pyramidal in outline with drooping branches.

R. obtusa. A fine large tree, with dense fan-like foliage of light green color. A native of Japan, where it reaches a height of from 70 to 100 feet.

R. obtusa gracilis (Graceful Hinoki Cypress). A beautiful and rare type of the Retinospora, more erect in growth, dense in habit, and pyramidal in shape than the others.

R. obtusa nana. One of the finest of the family in showy arrangement of foliage; dwarf, dense, slow-growing habit, and depth of color.

R. pisifera (Pea-fruited Retinospora). A smaller tree than *R. obtusa*; slender in growth, with elegant feathery foliage. It is a hardy, graceful and rapid-growing evergreen.

R. plumosa. Dwarf; dense-growing; branchlets slender and feathery.

R. plumosa argentea (Silver-tipped Retinospora). The young growth on the tips of the branches is creamy white, giving the bush a pretty mottled effect. 15 to 18 inches high.

R. plumosa aurea. Gold-tipped leaves; bright all year.

R. squarrosa Veitchii (Veitch's Retinospora). A handsome, erect, glaucous tree, of medium size; valuable to add variety and contrast to a collection.



Globe Arborvitæ

TAXUS (Yew). The small, dense leafage of the Yews makes it possible to trim them into almost any form. They are not entirely hardy.

T. baccata aurea (Golden Yew). Leaves margined with yellow.

T. cuspidata brevifolia. A very handsome, rare form of the Japanese Yew, with short, dark green leaves and dense, bushy habit. The hardiest of the Yews.

Evergreen Shrubs

AZALEA amoena (Hardy Evergreen Azalea). A small bushy shrub with green leaves, changing in winter to a rich bronze color. In the spring the whole plant is covered with beautiful purplish red flowers. Very useful as an edging for beds of rhododendrons or kalmias.

A. Hinodigiri. From Japan. Very similar to the above in growth and foliage, but the flowers are of a brilliant scarlet color; more showy than *A. amoena*.

BUXUS (Box). Best dwarf and tall sorts. Desirable for borders or low hedges.

THUYA (Arborvitæ). The Arborvitæs vary greatly in habit of growth and color. They have many uses, being well suited for hedges, screens, house decoration and formal gardens. They are symmetrical in growth, of dense foliage with flattened frond-like leaves.

T. occidentalis (American Arborvitæ). Sometimes called White Cedar.

T. occidentalis aurea (Douglas's Golden Arborvitæ). Bright yellow foliage.

T. occidentalis compacta (Parsons' Compact Arborvitæ). Dwarf; dense; handsome; 3 to 4 feet.

T. orientalis elegantissima (Rollinson's Golden Arborvitæ). A very handsome golden kind, upright in habit, and in the winter changing to an attractive bronze.

T. occidentalis globosa (Globe Arborvitæ). Natural evergreen ball; hardy.

T. occidentalis pyramidalis (Pyramidal Arborvitæ). A choice, hardy, columnar tree that grows from 20 to 30 feet high.

T. occidentalis sibirica (Siberian Arborvitæ). Compact, pyramidal and constant in color; hedges and screens.

T. occidentalis Lutea (George Peabody). Handsomest golden Arborvitæ, and cannot be too highly recommended.

T. orientalis conspicua aurea. Similar to *T. orientalis elegantissima* in growth, but more beautiful and deeper golden color.

T. orientalis nana aurea. A dwarf rounded form; pretty and golden.

ILEX aquifolium (English or European Holly). Leaves of intense, deep, shining green, with undulating, spine-tipped margins. Scarlet berries and glossy green leaves make it conspicuous in winter.

KALMIA latifolia (Mountain Laurel; Calico Bush). Flowers white to rose.

RHODODENDRON (Rose Bay; Laurel). Elegant in masses and groups. Best hardy English Hybrids, Catawbiense, Seedlings and *Rhododendron maximum*.

YUCCA filamentosa. Creamy white, bell-shaped flowers.

The Bulbs, Plants, Etc.

FALL PLANTING.—Hyacinths, assorted; Narcissus, assorted; Tulips, assorted; Crocus, assorted.

SPRING PLANTING.—These are tender varieties and should be taken up in the fall and placed in a dry cellar to keep from freezing. Cannas, assorted; Dahlias, assorted; Gladioli, assorted; Tuberose.

HARDY PERENNIALS.—These may be planted in either spring or fall and with little care it is possible to have a display of bloom year after year. Herbaceous Peonies, pink, red and white; Lilies; Golden Glow; Phlox, assorted; Japan Iris, assorted; German Iris, assorted; Pompon Chrysanthemums; hardy Poppies; Delphiniums; Day Lilies.



The Rose

Everybody loves Roses, but most people are too prone to admire them in the gardens of others, whereas they might easily be grown in their own. Roses require no particular care or attention, and all of the hardy garden Roses, Climbers and those of the Polyantha type require no protection whatever in the United States. The Teas and Hybrid Teas require protection against frost in Pennsylvania and states farther north, but this protection is so easily given and the summer blooms are so remarkable that the effort is well worth while.

Our list of Roses has been prepared with great care. We have been careful to include all of the sorts we consider best, and equally careful to eliminate from our list any sort which has been superseded by a new and better variety. This care in selection upon our part almost guarantees that you will be satisfied. Should you desire any varieties not to be found in our collection, we shall be glad to secure them for you. We are able to do this upon short notice—almost as soon as we can supply the Roses from our regular list.

We are favorably located to produce Rose bushes; our advantages of soil and climate enable us to produce plants that have a large, well-developed root-growth and properly grown tops. These plants should produce blooms the first year, and an abundance of bloom each succeeding year.

Hardy Garden Roses

These are a favorite and entirely hardy race of Roses, not perpetual in bloom, but yielding a second crop of flowers in autumn. Give them rich soil, a sunny situation, and prune the weak shoots severely, leaving the stronger ones of greater length.

American Beauty. Rich pink, with
carmine shadings; very large.

Frau Karl Druschki. Pure white;
exquisite texture; large and fragrant.



Paul Neyron Roses

HARDY GARDEN ROSES, continued

General Jacqueminot. Brilliant crimson; large buds; handsome.

Hugh Dickson. A vigorous, free grower and perpetual bloomer with fine foliage; color brilliant crimson shaded scarlet; large and fine form, opening well in all weathers. Very sweetly scented.

J. B. Clark. The color is unique among Roses, being deep scarlet shaded blackish crimson, with a rich bloom like a plum; flowers are large and beautifully formed. Awarded the gold medal, National Rose Society.

Magna Charta. Full; globular pink, with carmine shadings and delightful fragrance. Plant strong, and blooms freely.

Mrs. John Laing. Soft pink; fragrant; full and finely formed.

Paul Neyron. A very large, deep pink Rose of good form; free-blooming; desirable for the garden.

Persian Yellow. The favorite old Austrian Rose, with small, bright yellow, nearly full flowers.

Tea and Everblooming Roses

The Everblooming Roses are tenderer than other sorts, and require more careful winter protection. They are the most fragrant and delicately beautiful of all Roses; excellent as cut-flowers.

Betty. Very large flowers; fairly full and of splendid form; color coppery rose, shaded golden yellow; deliciously perfumed. Without doubt a sterling Rose. Gold Medal, National Rose Society.

Bride. Pure white; large, beautifully formed; fragrant; free-blooming; admirably adapted for forcing.

Bridesmaid. A sport from Catherine Mermet, and considered a better Rose because of its deeper, clearer pink and its constancy of color.

Catherine Mermet. One of the finest forcing Teas. Soft, silvery flesh color; large, full and well formed; fragrant; very beautiful in bud.

Etoile de Lyon. A beautiful light yellow Rose, similar to Perle des Jardins in size, form and fullness.

Gloire de Dijon. Usually trained as a climbing Rose. Flowers large and globular; a glowing combination of salmon, orange, and buff. A very useful Rose; probably the hardiest Noisette.

Helen Gould. One of the finest of the hardy everblooming Roses. Extra-large, double, delightfully fragrant crimson flowers on strong stems. Vigorous; prolific.

Hermosa (Bourbon). Bright rose-colored flowers of medium size; constant bloomer; bushy habit.

Mme. Francisca Kruger. Noted for its great quantities of coppery yellow flowers. Specially good for producing color effects by massing.

Mme. Lombard. A first-class Rose for garden planting or pot-culture; habit of growth is vigorous; very free bloomer. A beautiful shade of rosy bronze, changing to salmon and fawn, shaded with carmine. Very sweet-scented.

TEA AND EVERBLOOMING ROSES,
continued

Mme. Welche. A grand everblooming Rose of remarkable beauty; large, full, globular flowers, and long, finely pointed buds. Color soft yellow, clouded with pale rose; very fragrant; blooms all season.

Marie Van Houtte. Blooms continually; flowers large, well-shaped, sweet-scented. It succeeds anywhere and in any soil; an exceedingly strong, vigorous grower. Creamy white, with the outer petals outlined bright rose.

Mrs. B. R. Cant. Bright, rosy pink; very full and double; of exquisite fragrance. Splendid bedding Rose; blooms freely from early summer to frost, if the faded flowers are cut and the plant slightly pruned.

Papa Gontier. Rose, shaded yellow, with crimson reverse of petals; large; semi-double; fragrant; free in growth and bloom.

Perle des Jardins. The popular yellow forcing Rose; large, full and fragrant; a fine variety.

Sunrise. Dark, peachy red, shaded with orange and crimson. Exquisitely tea-scented. Extra-large in size and very double. A wonderful bloomer.

Sunset. Amber-yellow, with darker center; similar to Perle des Jardins in form, size, and general habit.



Gruss an Teplitz Roses

Hybrid Tea Roses

The Hybrid Tea Rose is the result of crossing Tea and Hybrid Perpetual Roses, and adds to the everblooming habit of one parent much of the hardy constitution and freedom of bloom of the other.

Columbia. Immense flowers, frequently measuring 6 inches across when fully opened. The beautiful pink coloring becomes more intense as the blooms mature. A strong, vigorous grower which produces its flowers on stems that are free from thorns for a foot below the bloom.

Crusader. Large, splendidly formed, crimson flowers are produced quite freely throughout the season. An excellent sort for the garden, as it makes a strong growth and is unusually robust.

Etoile de France. A vigorous grower, with dark foliage. Flowers full and double, borne on strong upright shoots in profusion; color, rich velvety crimson.

Gruss an Teplitz. One of the finest crimson Teas grown. Dark rich, velvety crimson, shading to brilliant red. Flowers are large, full, and of delicious perfume.



Papa Gontier Roses



June and October are alike to a garden of Tea Roses

HYBRID TEA ROSES, continued

Jonkheer J. L. Mock. Unusually large flowers of more than ordinary beauty. The broad petals are bright cherry-red on the outside and silvery pinkish-white on the inside. They are well formed, being somewhat higher at the center than at the edge of the bloom. Extremely fragrant.

Kaiserin Augusta Victoria. A superb white Rose, of almost perfect form in flower and bud; large, full and double. Elegant fragrance; the plant strong, with handsome foliage and a continual show of blossoms.

Killarney. Buds long and pointed; brilliant imperial pink. Free bloomer; hardy.

La France. One of the sweetest and most beautiful of all Roses. Delicate pink; large, full, rounded; constant bloomer.

Marechal Niel. (Noisette.) The finest yellow Rose. Rich yellow; large, full, globular; fragrant. Of uncertain growth.

Mme. Caroline Testout. Bright, clear pink; flowers larger than those of La France and plant more robust.

Mme. Ravary. Not a new Rose, but not largely disseminated in this country. It is probable that more of this yellow Rose is planted in England, Ireland, and the Continent than all other yellows combined. In growth and habit it is much like Mme. Caroline Testout. Long, pointed buds of beautiful golden yellow, opening to large, full orange-yellow flowers; very free-flowering.

Mrs. Aaron Ward. A splendid yellow rose, remarkable for its changes in shading from the time the bud opens until the flower matures. Plants are healthy and vigorous, and produce vast quantities of bloom.

My Maryland. One of the finest American introductions. It has jumped into popular favor at once. The plant is of strong, vigorous growth. Extremely free-flowering, every shoot bearing one or more double flowers of perfect form. Color, glowing intense pink, which lightens up beautifully as the flower expands. Strongly and delightfully fragrant.

Meteor. Rich, velvety crimson; constant in color and habit.

Ophelia. Light salmon-pink, shaded to yellow at the base of the petals. The flowers are large and full; most attractive in every way. Blooms profusely all summer and far into the autumn.

Premier. One of the best dark pink Roses. Blooms are large and full petalled, delightfully fragrant. They are borne on stiff thornless stems which make cutting a pleasure. Blooms constantly.

Red Radiance. Huge, globular flowers of excellent substance and rich coloring; a handsome deep red. Blooms are borne on strong, heavy canes, which seem quite immune to disease.

Richmond. Splendid large, double flowers of fine texture. Bush is vigorous grower and bears in great profusion.

HYBRID TEA ROSES, continued

Souv. du Pres. Carnot. Buds long and pointed, and borne on stiff, erect stems; flower large, of exquisite shape, with heavy, shell-like petals; color delicate, rosy flesh, shaded deeper at the center.

Sunburst. A splendid yellow Rose, noted for its long, perfectly formed buds and rich coloring. The reddish green bronzed foliage makes a splendid background for the blooms and the scarcity of thorns make it a popular sort for cutting.

White Killarney. A sport of the well-known Pink Killarney. It produces an abundance of beautiful flowers. The blooms are long and well shaped, of the type that is most popular at the present time. One of the best white Hybrid Teas.

Climbing Moss Rose

CUMBERLAND BELLE. A distinctly novel form of the beautiful Moss Rose family. A sport from the exquisite Princess Adelaide and possesses the charm of its parent with a strong climbing habit. The flowers are of a soft silvery rose, and very fragrant. The buds are beautifully mossed and exquisite.



White Killarney Roses

Hardy Running Roses

These Roses are much used for covering pillars, trellises and porches, for which purpose they are admirably adapted. They are hardy without protection, require little or no pruning, growing strongly and blooming freely anywhere.



American Pillar Roses

Alberic Barbier. Long, slender, sulphur-yellow buds, which as they open become blooms of creamy white. Extremely desirable variety, rendered more beautiful by its handsome glossy foliage.

American Pillar. Large, single flowers of cherry-pink, with a white eye and an abundance of golden yellow stamens. The plant makes a strong growth and produces flowers in profusion.

Clotilde Soupert, Climbing. Ivory-white blooms shading to silvery rose in center. The individual flowers are fully as beautiful as any in our list, and the plants make a vigorous growth, producing blooms in profusion.

Dr. W. Van Fleet. Large blooms with high-built centers and beautifully cut petals. A delicate shade of flesh-pink on the outer surface assumes a deeper shade toward the center. A delicate perfume, the splendid coloring and the fullness of the petals, combine to make this one of the most attractive climbing Roses. After the plant is fully established the canes grow from 10 to 15 feet long each season, and it is often possible to secure hundreds of blooms from a single plant. Originated by the late Dr. Van Fleet, of Washington.



Dorothy Perkins Roses

HARDY RUNNING ROSES, continued

Dorothy Perkins. One of the hardiest of the climbers. Flowers are borne in immense clusters and are of shell-pink, running to deep rose; large, pointed buds.

Gardenia (Hardy Marechal Niel). Exquisite blooms, resembling Marechal Niel; perfectly double and borne in great profusion.

Lady Ashtown, Climbing. Large, pink flowers are produced in profusion. The canes make a strong and rapid growth.

Meteor, Climbing. Large, dark velvety crimson flowers, equal to any Roses found anywhere. A true climber, which will often attain a height of 10 to 15 feet in a single season.

Philadelphia Rambler. A great improvement on the Crimson, but like it in habit. Flowers larger, richer red, more profuse in bloom, and two weeks earlier, holding its color to the last.

Silver Moon. The long, shapely buds are creamy yellow when they first appear; after they open, they are pure white, with a mass of yellow stamens in the center. The blooms are really immense, often attaining a diameter of 5 inches. The plants make a strong growth and seem to be quite immune from disease.

White Rambler. It is a strong, rampant grower, producing large clusters of small, double, white flowers in great profusion.

Wootton, Climbing. When the buds first appear they are bright magenta-red, becoming later a rich violet-crimson. The canes are hardy and make vigorous growth, producing great quantities of bloom.

Yellow Rambler. Light canary-yellow.

Polyantha Roses

A pretty and interesting group of Japanese Roses, with the marked characteristics of blooming in panicles, small flowers and leaves, dwarf, somewhat slender growth continual blooming and hardiness.

Baby Rambler. A cross between the Crimson Rambler and Gloire des Polyantha, combining the prolific flowering qualities of the latter, with the color of Crimson Rambler (clear brilliant ruby-rose). The bush is vigorous and absolutely hardy, reaching a height of 2 to 2½ feet. Begins blooming in early June and continues until late frost. Fine for bedding.

Cecile Brunner. Salmon-pink, with deeper center; delicately scented.

Clotilde Soupert. Pearl-white, with rosy pink center; of medium size and very double, with beautifully imbricated petals.

Pink Soupert. Free-blooming, producing cluster after cluster of deep, rich pink flowers. One of the best hardy pink bedding Roses.

The Hardy Ornamental Vines

AMPELOPSIS quinquefolia. The well-known Virginia Creeper, used for covering walls, arbors and the like.

A. Veitchii (Japanese Ivy). Clings closely to walls by means of aerial rootlets, clothing them with a sheet of delicate green foliage, which turns to vivid scarlet and crimson in autumn; berries purplish.

ARISTOLOCHIA Sipho (Pipe Vine). Very rapid-growing; leaves immense; flowers yellowish brown, of curious shape.

BIGNONIA grandiflora (Trumpet Creeper). An elegant woody vine, with finely divided, glossy foliage and large trumpet-shaped bright scarlet flowers.

B. radicans (Scarlet Trumpet Vine). An old-time favorite. Flowers perfect trumpet-shaped, bright scarlet; a rapid grower. One of the finest vines for covering old stumps, fences, trellises, etc. Blooms almost all summer.

CLEMATIS. The Clematises are perfectly hardy, and very easy to cultivate, requiring a good, rich soil and some attention in pruning and training. They bloom from May to October, producing during that period an abundance of handsome flowers of all shades of color.

C. Alexandra. One of the continuous blooming sorts of real merit. The flowers are large and of a pale reddish violet color.

C. Henryi. Very large flowers, creamy white; free in growth and bloom.

C. Jackmani. One of the best large-flowering varieties; rich, dark, velvety purple.

C. paniculata. The flowers are pure or cream-white, star-shaped, about an inch in diameter, and borne in clusters on stiff stems from 4 to 6 inches long in the axil of nearly every leaf. From mid-August until late September it is a cool fragrant bank of white.

C. Ramona. A seedling of the Jackmani type; one of the strongest growers; flowers lavender-blue. Invariably gives satisfaction.

EUONYMUS radicans vegeta (Evergreen Bittersweet). A hardy climbing vine which is quite evergreen. In addition to the beautiful foliage, the vine produces a profusion of bright red berries in the winter season. One of the most beautiful vines in America.

HEDERA Helix. Better known by every one as the beautiful hardy English Ivy, which is so popular in both the Old World and the New.

LONICERA brachypoda aureo-reticulata (Japan Golden or Sunset Honeysuckle). Flowers pure white, sweet, in pretty clusters; leaves roundish, richly marked yellow; a perennial beauty.

L. japonica (Chinese Twining Honeysuckle). Leaves purplish, almost persistent; flowers bright and fragrant; blooms in summer and fall.

L. japonica Halliana (Hall's Japan Honeysuckle). In bloom all season; flowers white, changing to yellow; fragrant; borne in beautiful sprays.

WISTARIA sinensis. Flowers are a lovely combination of violet, shading into lilac and white in long, pendulous racemes.

W. sinensis alba. Similar to *W. sinensis* except that the flowers are white; forms a fine contrast to that variety.



Clematis Henryi

The Ornamental Grasses

Eulalia gracillima.

E. japonica.

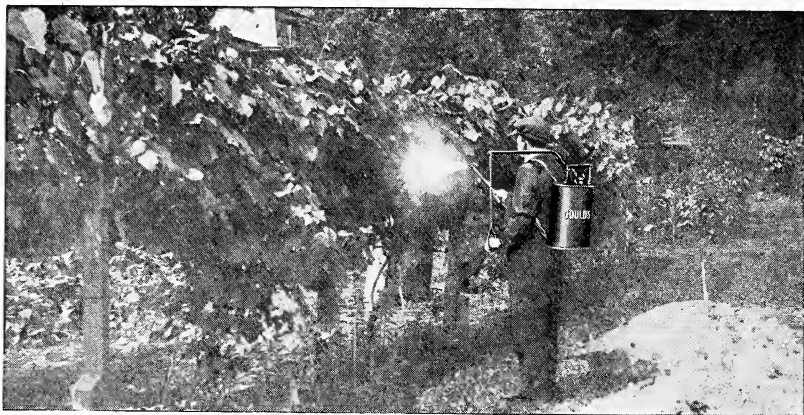
E. japonica variegata

Eulalia japonica zebrina.

Erianthus Ravennæ.

Gynierium argenteum.

Phalaris arundinacea.



For a small garden use a knapsack type sprayer; for an orchard a power machine is more effective and rapid

Spraying Hints

Your fruit orchards, your ornamental trees and vines, your roses—almost everything, in fact, that grows—needs an occasional spraying to make it succeed as it should; the following directions and calendar will prove helpful.

It is always the best economy to buy a *reliable* spray-pump—one large enough and good enough to do the necessary work. Such an outfit will operate easier, and prove cheaper in the end, than an inferior outfit on which a little money was “saved” at first.

If you do not care to trouble about mixing your own solutions, you can buy them already made up, from dealers almost anywhere. These preparations are concentrated and are made ready for use by mixing with water. Bordeaux Mixture and insecticides of all kinds, remedies for San José scale, etc., can be obtained in concentrated form.

Formulas

Bordeaux Mixture. Formula (the “normal” or 1.6 per cent): copper sulphate, 6 pounds; quicklime (unslaked), 4 pounds; water, 45 gallons. If air-slaked lime is used in place of the fresh article, double the amount should be used; but the fresh is much more reliable. By combining the copper and lime it is found that the copper sulphate may be used more freely and with less injury than if used alone, and that it will adhere a long time to the foliage.

To make the Bordeaux Mixture, dissolve the copper in hot water (or if placed in a coarse sack or basket, and suspended in a tub of cold water, it will dissolve in two or three hours, while if put in cold water on the bottom of a tub or vessel, it remains undissolved for a long time), then in a separate tub slake the lime thoroughly, and when both are cold, pour the two together, stirring constantly. Dilute with water to make 45 or 50 gallons of liquid. Before using, the mixture should be strained through a burlap or fine wire strainer to take out the coarse particles of lime.

If insects are found attacking the plants or trees to be treated for fungous growth, paris green may be added to the Bordeaux Mixture at the rate of one pound to 100 or 200 gallons of the mixture, and the lime will prevent this large quantity of paris green from burning the foliage and two pests be destroyed by one spraying. In spraying peach trees, use about one-third more water.

Kerosene Emulsion. Formula: One-half pound common bar soap, 2 gallons of water, 2 gallons of common kerosene. Dissolve the soap in hot water; while still hot, add the kerosene and stir vigorously until a soft soap or cream-like substance is formed. When cold, dilute with water to make from 10 to 25 gallons of liquid. This is used for the destruction of sucking insects, like aphides (plant-lice) scale insects, etc. Always use soft water.

Paris Green alone can be safely used only at the rate of one pound to 250 to 300 gallons of water; if, however, 2 pounds of lime be slaked in water and added to 25 gallons of water, at this rate 1 pound of paris green can be used in 100 gallons of water without injury to the foliage.

THE HANDY SPRAY CALENDAR. A Condensed Table of Diseases and Remedies

Prepared by Howard Everts Weed, M. S., formerly Entomologist and Horticulturist, Mississippi Experiment Station. Reproduced by permission of the Deming Co., Spray Pump Manufacturers, Salem, Ohio

Plant	Insects and Diseases	Remedy	First Application	Second Application	Third Application	Remarks
APPLE.....	San José Scale.	Lime-sulphur or soluble oils, as recommended.	Early in November.	In February, same as first.	For summer treatment, use 10 per cent kerosene.	San José scale cannot be destroyed in a single treatment, but is easily kept in check by a little effort. If only a few trees of an orchard are affected, burn them off.
	Oyster-shell and Scurfy Scale.	Soluble oils as recommended.	Use when young hatch in early spring.	Repeat in 10 days.		If Woolly Aphis is present on roots, dip stock in 1-15 solution of recommended prepared oil compound.
	Codlin Moth. Bud Moth. Apple Scab.	Bordeaux and arsenate of lead mixed.	Early spring, before the buds swell.	As soon as blossoms fall.	Two weeks later.	A fourth application will pay. If bitter rot is present, a fifth application should be made.
CHERRY.....	Black Aphis and Rot.	Kerosene, soluble oils as recommended.	Soluble oils as recommended as soon as plant life is noticed. Bordeaux when fruit has set.	Repeat if needed.	Repeat if needed.	Cherry Aphis is one of the hardest insects to kill and the kerosene should be used as strong as possible, but not strong enough to kill the foliage.
	Rot and Mildew.	Bordeaux.	When buds first swell.	Repeat in 10 days.	Repeat in 10 days.	Fourth application is needed. Use arsenate of lead if flea beetles are present.
PEACH.....	Rot and Leaf-Curl.	Bordeaux.	In March, before buds swell.	After blossoms fall.	Repeat in 2 weeks.	Best to add arsenate of lead for any biting insects which may be present.
PEAR.....	Codlin Moth and Scab.	Bordeaux, with arsenate of lead added.	Before blossoms open.	After blossoms fall.	Repeat 2 weeks later.	The fire blight of the pear cannot be controlled by spraying.
	Curculio Rot and Blight.	Bordeaux, with arsenate of lead added.	After blossoms fall.	Repeat in 10 days.	Recommended solution if aphid is present.	If scale insects are present, use lime-sulphur or recommended compound.
CURRENT and GOOSEBERRY.	Mildew, worms, Aphis.	Bordeaux.	When leaves appear.	Ten days later, Bordeaux.	Repeat second when necessary.	Watch the plants closely in spring and begin spraying as soon as worms are discovered.
RASPBERRY BLACKBERRY and GOOSEBERRY	Fungous diseases.	Bordeaux.	When buds begin to swell.	When leaves are opening, Bordeaux. Cut out all rested canes.	Two weeks later (when not in flower) repeat second.	Dilute the mixture to half the strength given in formula—100 gallons of water instead of 50.



Willowdale Nurseries

THE RAKESTRAW-PYLE CO.

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